1998

ATV

OWNER'S SAFETY AND MAINTENANCE MANUAL

Read this manual carefully.
It contains important safety information.
This in an adult vehicle only.
Operation is prohibited for those under 18 years of age.

POLARIS

⚠WARNING

THIS VEHICLE CAN BE HAZARDOUS TO OPERATE.
A collision or rollover can occur quickly, even during routine maneuvers such as turning and driving on hills or over obstacles, if you fail to take proper precautions.

SEVERE INJURY OR DEATH can result if you do not follow these instructions:

- **BEFORE YOU OPERATE THIS ATV, READ THE OWNER'S MANUAL AND ALL LABELS.**
- **NEVER OPERATE THIS ATV WITHOUT PROPER INSTRUCTION.** Beginners should complete a certified training course.
- **NEVER CARRY A PASSENGER.** You increase your risk of losing control if you carry a passenger.
- **NEVER OPERATE THIS ATV ON PAVED SURFACES.** You increase your risk of losing control if you operate this ATV on pavement.
- **NEVER OPERATE THIS ATV ON PUBLIC ROADS.** You can collide with another vehicle if you operate this ATV on a public road.
- **ALWAYS WEAR AN APPROVED HELMET,** eye protection, and protective clothing.
- **NEVER CONSUME ALCOHOL OR DRUGS** before or while operating this ATV.
- **NEVER OPERATE THIS ATV AT EXCESSIVE SPEEDS.** You increase your risk of losing control if you operate this ATV at speeds too fast for the terrain, visibility conditions, or your experience.
- **NEVER ATTEMPT WHEELIES, JUMPS, OR OTHER STUNTS.**

POLARIS
INDUSTRIES INC.

RZR POLARIS

Part No. 9914659 Rev 02
PRINTED IN THE USA

⚠WARNING

The engine exhaust from this product contains chemicals known to cause cancer, birth defects or other reproductive harm.

A card containing important ATV safety information should be attached to the owner's manual on the next page. If you cannot locate this card, or if it has been removed, please call 1-800-342-3764 for assistance.

FOREWORD

Congratulations and thank you from Polaris Industries Inc. for purchasing one of our all-terrain vehicles (ATV's). Built with American engineering and manufacturing know-how, it is designed to provide superior riding comfort, enjoyment and safety.

This manual is furnished to ensure that the operator is aware of safe operating procedures. It also includes information about the general care and maintenance of your ATV.

Carefully read the following pages. If you have any questions regarding this ATV contact a Polaris dealer for assistance. Remember, Polaris dealers have the knowledge and facilities to provide you with the best service possible.

PROTECT YOUR SPORT

Know all local, state/province riding laws;

Respect your vehicle;

Respect the environment; and

You will gain the respect of others.

We also advise you to strictly follow the recommended maintenance program as outlined. This preventive maintenance program is designed to ensure that all critical components on this ATV are thoroughly inspected at various intervals.

All information in this manual is based upon the latest product data and specifications available at the time of printing. Polaris Industries Inc. reserves the right to make product changes and improvements which may affect illustrations or explanations.

No part of this manual shall be reproduced or used without the written permission of Polaris Industries Inc.

Illustrations included in this manual are general representations of parts having a similar function. Your model may differ.

AN ATV IS NOT A TOY AND CAN BE HAZARDOUS TO OPERATE. An ATV handles differently from other vehicles including motorcycles and cars. A collision or rollover can occur quickly, even during routine maneuvers such as turning and driving on hills or over obstacles, if you fail to take proper precautions.

SEVERE INJURY OR DEATH can result if you do not follow these instructions:

- Read this manual and all labels carefully and follow the operating procedures described.
- Never operate an ATV without proper instruction. **Take a training course.** Beginners should receive training from a certified instructor. Contact an authorized Polaris ATV dealer or call Polaris at 1-800-342-3764 to find out about the training courses nearest you.
- Never allow anyone under 18 years of age to operate this ATV.
- Never permit a guest to operate this ATV unless the guest has read this manual and all product labels, and has completed a certified training course.
- Never operate an ATV on any paved surfaces, including sidewalks, driveways, parking lots and streets.
- Never operate an ATV without wearing an approved helmet that fits properly. You should also wear eye protection (goggles or face shield), gloves, boots, long-sleeved shirt or jacket, and long pants.
- Never consume alcohol or drugs before or while operating this ATV.
- Never operate at excessive speeds. Always travel at a speed which is proper for the terrain, visibility and operating conditions, and your experience.
- Never attempt wheelies, jumps or other stunts.
- Always inspect your ATV each time you use it to make sure it is in safe operating condition. Always follow the inspection and maintenance procedures and schedules described in this manual.
- Always keep both hands on the handlebars and both feet on the footrests of the ATV during operation.
- Always go slowly and be extra careful when operating on unfamiliar terrain. Always be alert to changing terrain conditions when operating the ATV.
- Never operate on excessively rough, slippery or loose terrain.
- Always follow proper procedures for turning as described in this manual. Practice turning at low speeds before attempting to turn at faster speeds. Do not turn at excessive speed.
- Always have the ATV checked by an authorized Polaris dealer if it has been involved in an accident.
- Never operate the ATV on hills too steep for the ATV or for your abilities. Practice on smaller hills before attempting larger hills.

- Always follow proper procedures for climbing hills as described in this manual. Check the terrain carefully before you start up any hill. Never climb hills with excessively slippery or loose surfaces. Shift your weight forward. Never open the throttle suddenly or make sudden gear changes. Never go over the top of any hill at high speed.
- Always follow proper procedures for going down hills and for braking on hills as described in this manual. Check the terrain carefully before you start down any hill. Shift your weight backward. Never go down a hill at high speed. Avoid going down a hill at an angle which would cause the vehicle to lean sharply to one side. Go straight down the hill where possible.
- Always follow proper procedures for crossing the side of a hill as described in this manual. Avoid hills with excessively slippery or loose surfaces. Shift your weight to the uphill side of the ATV. Never attempt to turn the ATV around on any hill until you have mastered the turning technique described in this manual on level ground. Avoid crossing the side of a steep hill if possible.
- Always use proper procedures if you stall or roll backwards when climbing a hill. To avoid stalling, maintain a steady speed when climbing a hill. If you stall or roll backwards, follow the special procedure for braking described in this manual. Dismount on the uphill side or to either side if pointed straight uphill. Turn the ATV around and remount, following the procedure described in this manual.
- Always check for obstacles before operating in a new area. Never attempt to operate over large obstacles, such as large rocks or fallen trees. Always follow proper procedures when operating over obstacles as described in this manual.
- Always be careful of skidding or sliding. On slippery surfaces, such as ice, go slowly and be very cautious in order to reduce the chance of skidding or sliding out of control.
- Never operate an ATV in fast flowing water or in water deeper than that specified in this manual. Remember that wet brakes may have reduced stopping ability. Test your brakes after leaving water. If necessary, apply them lightly several times to let friction dry out the pads.
- Always be sure there are no obstacles or people behind you when you operate in reverse. When it is safe to proceed in reverse, go slowly. Avoid turning at sharp angles in reverse.
- Always use the size and type tires specified in this manual. Always maintain proper tire pressure as described in this manual.
- Never modify an ATV through improper installation or use of accessories.
- Never exceed the stated load capacity for an ATV. Cargo should be properly distributed and securely attached. Reduce speed and follow instructions in this manual for carrying cargo or pulling a trailer. Allow greater distance for braking.

FOR MORE INFORMATION ABOUT ATV SAFETY, call the Consumer Product Safety Commission at 1-800-638-2772, or Polaris at 1-800-342-3764.

⚠ WARNING indicates a potential hazard which could result in serious injury or death.

Additional Important Information...

Due to our concern for the safety of our customers and the general public, Polaris hereby strongly recommends and requests that consumers not have installed on a Polaris ATV any equipment which is intended to increase the speed or power of the vehicle; or make any other modifications to the vehicle for these purposes. Any modifications to the original equipment of the ATV substantially increase the risk of bodily injury. Please be aware that these modifications may create a substantial safety hazard.

Polaris hereby informs you that the warranty on your ATV is terminated if any such equipment has been added to the ATV or any modifications have been made to the ATV which increase its speed or power.

We also advise you to strictly follow the recommended maintenance program outlined in this manual. This preventive maintenance program is designed to ensure that all critical components on the ATV are thoroughly inspected by your dealer at various mileage intervals.

NOTE:

The addition of certain accessories including (but not limited to) mowers, blades, tires, sprayers, or large racks may change the handling characteristics of the ATV.

Be certain any accessories added to this ATV have been approved by Polaris.

Familiarize yourself with their function and affect on the ATV.

The Polaris Preferred Registered Owners (PRO) Family Your Owners Program

As the owner of a new Polaris vehicle, you are entitled to a FREE two- year membership in the Polaris PRO Family--the Preferred Registered Owners Family. It's an owners program for Polaris owners like you, people who have chosen the finest recreational vehicle available, people who share an interest in Polaris and its products.

Once your new vehicle's warranty is registered, you will receive a PRO Family membership packet that will include:

- A letter of welcome to the PRO Family
- A PRO Family card with your name and membership number
- A colorful sticker of the PRO logo
- A PRO merchandise brochure and order form.

As a PRO Family member, you're entitled to opportunities such as:

- A free subscription to PRO *Spirit*, the official magazine of the PRO Family
- The chance to buy insurance for you Polaris vehicle. The toll-free insurance telephone number is: 1-800-473-0111
- The chance to arrange travel through the Polaris Travel Center. The toll-free travel telephone number is: 1-800-267-1915
- The chance to apply to serve on PRO Consumer Councils that provide input into the Polaris vehicles of the future
- The chance to serve as a PRO Field Evaluator and provide feedback on your new vehicle
- The chance to take part in national PRO snowmobile, ATV or personal watercraft rides
- The chance to purchase exclusive PRO Family merchandise
- And more!

To order PRO merchandise, you'll complete the order form you receive with your membership packet, take the form to your Polaris dealer and pay for the merchandise. The merchandise will be shipped directly to your home from the PRO merchandise fulfillment center.

Watch for your PRO membership packet and the next issue of PRO *Spirit* magazine. This quarterly magazine will keep you informed about Polaris news and events, and special PRO merchandise, travel, and ride opportunities.

Enjoy your new Polaris vehicle, and welcome to the family--The Polaris PRO Family.

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UNDERSTANDING WARNINGS

ATTENTION:

This is an ADULT VEHICLE ONLY; not a toy. Operation is prohibited for anyone under 18 years of age. READ AND UNDERSTAND WARNINGS AND OWNER'S MANUAL BEFORE OPERATION.

⚠ KNOW YOUR VEHICLE BEFORE YOU BEGIN RIDING!

Read this manual thoroughly referring to the various areas which are being discussed on your machine. Operating this vehicle carries with it responsibilities for your personal safety, the safety of others, and the protection of our environment.

⚠ SAFETY TRAINING

When you purchased this vehicle your dealer presented a hands-on safety training course covering all aspects of ATV safety. In addition, you were provided with certain printed material which instructs you on safe operating procedures.
You should review this information on a regular basis. In the event you purchased a used Polaris ATV from a party other than a Polaris dealer, you can obtain this safety training at no charge from any authorized Polaris dealer.
Failure to follow the warnings contained in this manual can result in **SERIOUS INJURY OR DEATH.**

NOTE: Illustrations used in this manual are for general representation only. Your model may differ.

SAFETY ALERT

The following precautionary signal words are used throughout this manual to convey the following messages:

This is the safety alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury. Your safety is involved!

⚠WARNING — **Indicates a potential hazard which could result in serious injury or death.**

⚠CAUTION — **Indicates a potential hazard which may result in minor personal injury or damage to the ATV.**

NOTE — **The word "NOTE:" in this manual will alert you to key information or instructions.**

⚠WARNING

HAZARD
Failure to heed WARNINGS.

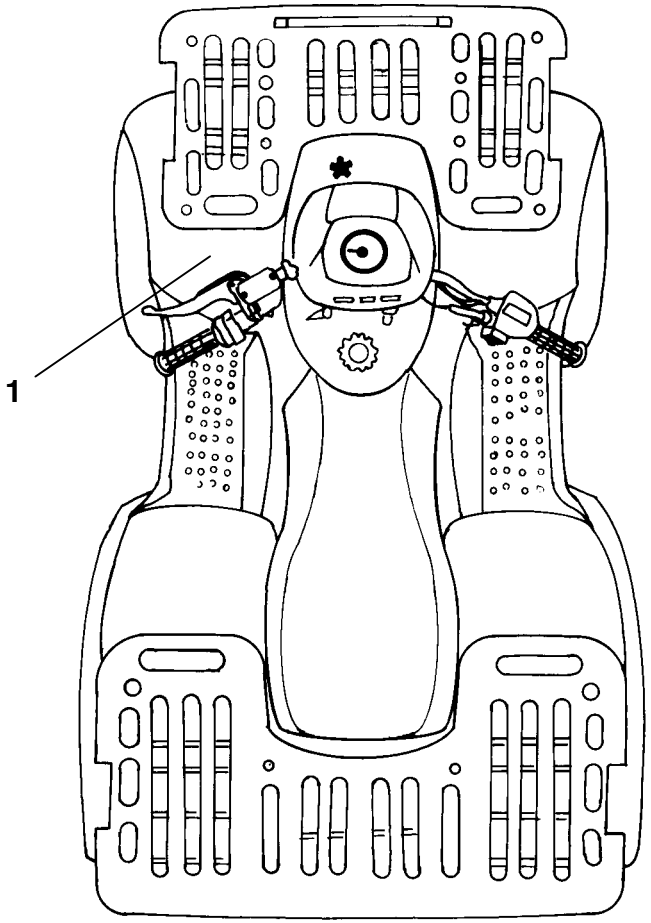
WHAT CAN HAPPEN
WARNINGS identify special instructions or procedures which, if not correctly followed, could result in personal injury, or loss of life.

HOW TO AVOID THE HAZARD
Read all WARNINGS in this manual carefully and for your safety be sure to follow their instructions.

SAFETY WARNING AND OPERATION DECALS

NOTE:

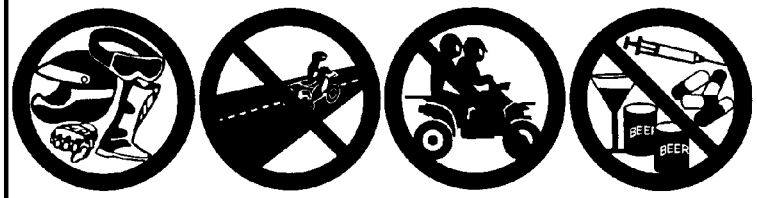
Warning decals have been placed on the vehicle for your protection. Read and follow the instructions on each decal carefully. In the event any decal becomes illegible or comes off, contact your Polaris dealer for a replacement. Any safety decal needing replacement will be provided by Polaris at no charge. The part number is printed on the decal.



1

⚠ WARNING

Improper ATV use can result in SEVERE INJURY or DEATH



ALWAYS USE AN APPROVED HELMET AND PROTECTIVE GEAR

NEVER USE ON PUBLIC ROADS

NEVER CARRY PASSENGERS

NEVER USE WITH DRUGS OR ALCOHOL

NEVER operate:

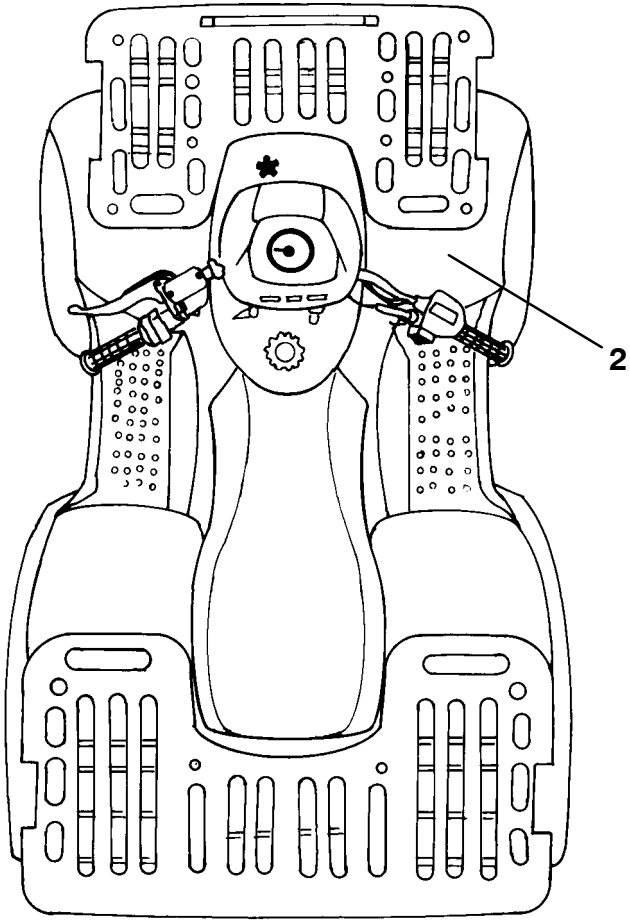
- without proper training or instruction
- at speeds too fast for your skills or the conditions
- on public roads - a collision can occur with another vehicle
- with a passenger - passengers affect balance and steering and increase risk of losing control

ALWAYS:

- use proper riding techniques to avoid vehicle overturns on hills and rough terrain and in turns
- avoid paved surfaces - pavement may seriously affect handling and control

LOCATE AND READ OWNER'S MANUAL.
FOLLOW ALL INSTRUCTIONS AND WARNINGS.

SAFETY WARNING AND OPERATION DECALS



2

⚠WARNING

READ AND UNDERSTAND WARNINGS AND OWNER'S MANUAL BEFORE OPERATION. SEVERE INJURY OR DEATH CAN RESULT FROM IGNORING WARNINGS OR IMPROPER USE.

TO REDUCE TIPOVER RISK, BE ESPECIALLY CAREFUL WHEN ENCOUNTERING OBSTACLES AND SLOPES, WHEN BRAKING ON HILLS OR DURING TURNS.

KEEP FEET ON FOOTRESTS AT ALL TIMES.

HILL CLIMBING IS DANGEROUS, and should be attempted only by experienced operators. Start on shallow slopes and practice procedures described in Owner's Manual before trying steeper terrain. Some hills are too steep to safely stop or recover from an unsuccessful climbing attempt. Effectiveness of brakes is significantly reduced on hills.

Never operate this ATV on grades steeper than 25 degrees ∠ 25°. If vehicle slides backwards down hill, apply hand brakes with gradual, even pressure to avoid flipover. Never open throttle suddenly as flipover may result.

REDUCE SPEED when operating this vehicle on rough or hilly terrain, or when carrying cargo on the racks.

REVERSE OPERATION CAN BE DANGEROUS even at low speeds. Steering control becomes difficult. When backing up, proceed slowly and apply hand brakes carefully; aggressive braking may result in flipover. Avoid backing downhill. Avoid turning at sharp angles in reverse.

USE OVERRIDE FOR REVERSE SPEED LIMITER WITH CAUTION; it allows full engine power and can result in excessive speeds. Never activate override button while throttle is open, as loss of control may result.

STOPPING DISTANCE MAY INCREASE with wet brakes or on wet surfaces.

AUXILIARY FOOT BRAKE: The right foot auxiliary brake pedal operates the rear brake only. When backing up or when operating on hills, avoid sudden use of the auxiliary brake; aggressive braking may result in flipover.

PARK BRAKE MAY RELAX WHEN USED FOR LONG PERIODS. When parking on grades, leave the gear shift in forward and don't leave brake engaged for more than 5 minutes.

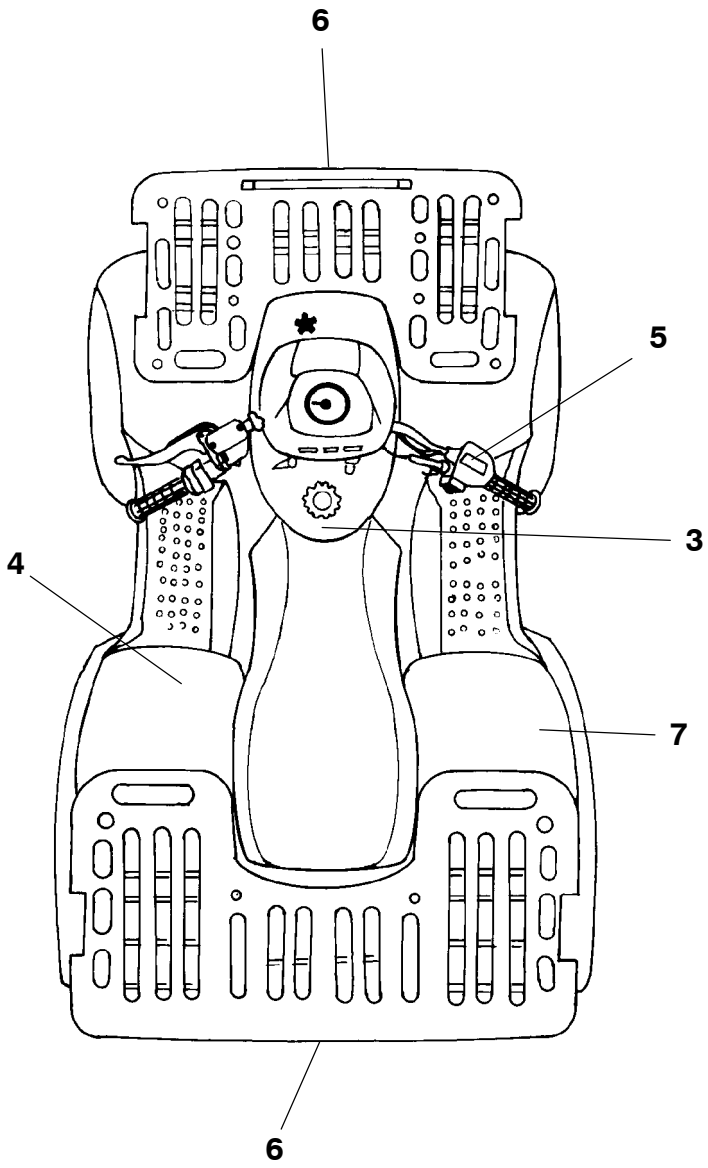
VEHICLE DESIGNED MAINLY FOR WARM WEATHER USE. Throttle linkage and brakes may stick if operated in freezing weather, causing loss of control. Dirt, mud, water, or other contaminants can also affect operation of controls. Check both frequently.

ENGINE SHUT OFF SWITCH is available for use in event of throttle failure or other emergency when engine shut off is desired.

NEVER PERMIT A GUEST TO OPERATE THIS ATV unless the guest has read the Owner's Manual and all labels, and has completed a certified training course.

⚠ **CAUTION:** Do not shift transmission while vehicle is moving. 7075413

SAFETY WARNING AND OPERATION DECALS



SAFETY WARNING AND OPERATION DECALS

5

ETC

This vehicle is equipped with a Polaris Electronic Throttle Control (ETC) to reduce the risk of a stuck or “frozen” throttle. Please refer to your Owner’s Manual for details.

7072724

7

⚠ WARNING

OVER-LOADING CAN CAUSE STEERING, TIPPING AND BRAKING PROBLEMS RESULTING IN LOSS OF CONTROL.

LOSS OF CONTROL CAN CAUSE SEVERE INJURY OR DEATH.

DO NOT OVERLOAD THE ATV.

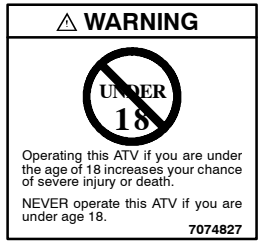
SEE YOUR OWNER’S MANUAL.

7072786

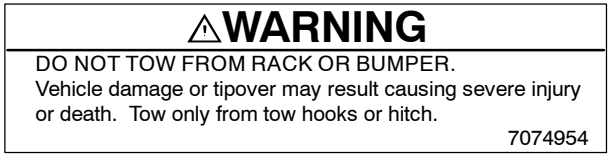
(Found on models with no racks)

4

3


⚠ WARNING
UNDER 18
Operating this ATV if you are under the age of 18 increases your chance of severe injury or death.
NEVER operate this ATV if you are under age 18.
7074827

6


⚠WARNING
DO NOT TOW FROM RACK OR BUMPER.
Vehicle damage or tipover may result causing severe injury or death. Tow only from tow hooks or hitch.
7074954

(Found on models with racks)

SAFETY WARNING AND OPERATION DECALS

This decal is found only on models with dual racks.

7

⚠ WARNING

LOAD DISTRIBUTION WARNINGS

Correct loading of this vehicle is necessary to maintain proper stability and operating characteristics. Overloading or incorrect positioning of the load effects the vehicles turning, stopping distance and stability. Failure to follow loading requirements could cause severe injury or death. REDUCE SPEED AND ALLOW GREATER DISTANCE FOR BRAKING WHEN CARRYING CARGO.

CARGO WEIGHT DISTRIBUTION should be 1/3 on the front rack and 2/3 on the rear rack. When operating over rough or hilly terrain, reduce speed and cargo to maintain stable driving conditions. Maximum cargo capacity is 270 lbs. on level terrain. When operating at maximum cargo capacity, the cargo weight distribution must be 90 lbs. on the front rack and 180 lbs. on the rear rack.

ALL LOADS MUST BE SECURED BEFORE MOVING VEHICLE. Unsecured loads can create unstable operating conditions which could result in loss of control of the vehicle.

LOADS MUST BE CARRIED AS LOW ON THE RACKS AS POSSIBLE. Carrying loads high on the racks raises the center of gravity of the vehicle and creates a less stable operating condition. When cargo loads are carried high on the racks, the weight of the loads must be reduced to maintain stable operating conditions.

OPERATE ONLY WITH STABLE AND SAFELY ARRANGED LOADS. When handling off-centered loads which cannot be centered, securely fasten load and operate with extra caution.

EXTREME CAUTION MUST BE USED when operating with loads extending over the rack sides. Stability and maneuverability may be adversely affected, causing the machine to overturn.

DO NOT BLOCK THE FRONT HEADLIGHT BEAM when carrying loads on the front rack.

SEE YOUR OWNER'S MANUAL. 7074110

This decal is found on models with only rear racks.

7

⚠WARNING

RACK LOAD WARNINGS

Correct loading of this vehicle is necessary to maintain proper stability and operating characteristics. Overloading or incorrect positioning of the load effects the vehicles turning, stopping distance and stability. Failure to follow loading requirements could cause severe injury or death. REDUCE SPEED AND ALLOW GREATER DISTANCE FOR BRAKING WHEN CARRYING CARGO.

MAXIMUM CARGO CAPACITY is 125 lbs. on level terrain. When operating over rough or hilly terrain, reduce speed and cargo to maintain stable driving conditions.

ALL LOADS MUST BE SECURED BEFORE MOVING VEHICLE. Unsecured loads can create unstable operating conditions which could result in loss of control of the vehicle.

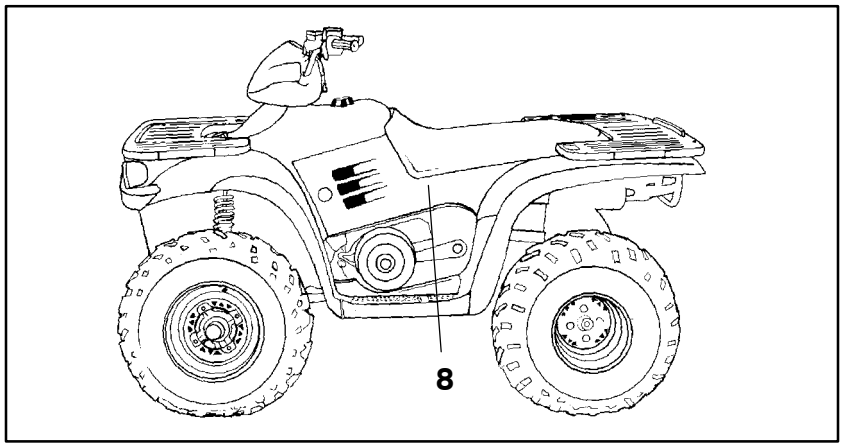
LOADS MUST BE CARRIED AS LOW ON THE RACK AS POSSIBLE. Carrying loads high on the rack raises the center of gravity of the vehicle and creates a less stable operating condition. When cargo load is carried high on the rack, the weight of the load must be reduced to maintain stable operating conditions.

OPERATE ONLY WITH STABLE AND SAFELY ARRANGED LOADS. When handling off-centered loads which cannot be centered, securely fasten load and operate with extra caution.

EXTREME CAUTION MUST BE USED when operating with loads extending over the rack sides. Stability and maneuverability may be adversely affected, causing the machine to overturn.

SEE YOUR OWNER'S MANUAL. 7074173

SAFETY WARNING AND OPERATION DECALS



8

ATTENTION

- OPERATION OF THIS VEHICLE WITHOUT THE FILTER ELEMENT WILL SEVERELY DAMAGE THE ENGINE.
- CLEAN AIR FILTER OFTEN, MORE FREQUENT CLEANING REQUIRED IN DUSTY CONDITIONS.

- L'utilisation de ce véhicule sous l'élément filtre endommage sévèrement le moteur.
- Nettoyer souvent le filtre à air, surtout dans des situations poussiereuses.

7072791

(Under Seat)

⚠WARNING

BRAKE SHIELD COVERS MOVING PARTS.

CONTACT WITH MOVING PARTS MAY RESULT IN SEVERE INJURY.

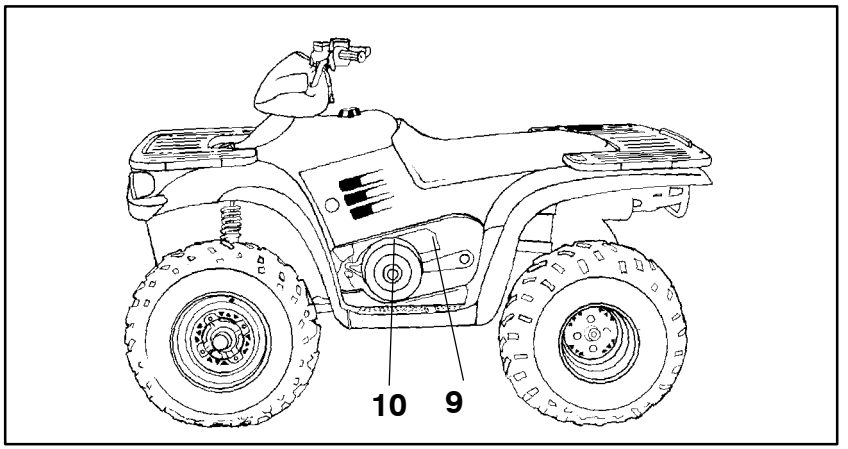
DO NOT REMOVE BRAKE SHIELD.

7075339

(On right side)

NO PASSENGER
PASSAGERS INTERDITS

SAFETY WARNING AND OPERATION DECALS



9

⚠ WARNING

DO NOT ATTEMPT ENGINE OR CLUTCH MODIFICATION. DOING SO CAN CAUSE IMBALANCE AND/OR EXCESSIVE ENGINE RPM.

EXCESSIVE ENGINE RPM CAN CAUSE PART FAILURE RESULTING IN POSSIBLE SEVERE INJURY OR DEATH.

DO NOT MODIFY ENGINE OR CLUTCH.

7077377

10

⚠ WARNING

BELT - CLUTCH GUARD COVERS MOVING PARTS.

CONTACT WITH MOVING PARTS MAY RESULT IN SEVERE INJURY OR DEATH.

DO NOT OPERATE VEHICLE WITH GUARD REMOVED.

NO STEP

7074946

SAFETY WARNING AND OPERATION DECALS

ATTENTION

Specific carburetor jetting and adjustments are required depending on temperature and altitude. See your Owner's Manual.

Factory setting:

40° to 80° F. at 0-3000 feet. (+5° to 26° C. at 0-900 meters). 7073761

Chain Freeplay Is Important. Collapse Suspension To Adjust. DO NOT Overtension. See Owner's Manual.

Torque Eccentric Bolts To 60 Ft. Lbs.

Le jeu libre de la chaine est important. Écrasez la suspension pour L'adjuster. Prenez soin de ne pas trop serrer la chaine. Voir le manuel d'opérateur.

Serrez les boulons de l'eccentrique à 60 livres/pieds de pression.

7074752

OVERRIDE SWITCH

Reverse override and all wheel drive activation in reverse is controlled by the override switch. See your Owner's Manual.

7076273

AWD Models

OVERRIDE SWITCH

Reverse Speed is limited.

Reverse override is controlled by the override switch.

See your Owner's Manual.

7076274

2WD Models

(Found on all models except Sportsman 500)

TRAILER MAX. WEIGHT 850 LBS.	POIDS MAX. DE REMORQUE 386 KG.
HITCH MAX. VERTICAL WEIGHT 30 LBS.	POIDS MAX. VERTICAL D'ATTACHE 14 KG.

7072533

(Found on Sportsman 500)

TRAILER MAX WEIGHT:
1250 LBS. (568 KG) ON LEVEL GROUND
850 LBS. (368 KG) UP TO 15° GRADE

HITCH MAX. VERTICAL WEIGHT: 30 LBS. (14KG)

7077542

ALL WHEEL DRIVE SWITCH

Do not push switch to engage AWD if the rear wheels are spinning. This may cause severe drive shaft and clutch damage.
See your Owner's Manual.

7074935

⚠ CAUTION

VEHICLE LIGHTS WILL BURN OUT IF BATTERY IS DISCONNECTED DURING VEHICLE OPERATION.

⚠ PRECAUTION

Les phares et les ampoules du véhicule sautent si la batterie est désaccouplée durant le fonctionnement du véhicule.

7072606

CANADA CMVSS B12 TRANSPORT CANADA

MANUFACTURED BY: POLARIS IND

DATE:

VIN:

THIS VEHICLE IS AN ALL TERRAIN VEHICLE AND IS NOT INTENDED FOR USE ON PUBLIC ROADS. THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE DATE OF ITS MANUFACTURE AS SHOWN ABOVE.

CE VÉHICULE EST UN VÉHICULE TOUT TERRAIN QUI N'EST PAS DESTINÉ À ÊTRE UTILISÉ SUR LES CHEMINS PUBLICS. CE VÉHICULE EST CONFORME À TOUTES LES NORMES DE SÉCURITÉ FÉDÉRALES PRESCRITES QUI SONT EN VIGUEUR À LA DATE DE SA FABRICATION INDIQUÉE CI-HAUT.

PRINTED IN U.S.A. 7073464

ATTENTION

LUBRICATE SWING ARM AND OUTPUT SHAFT BEARINGS MONTHLY; MORE OFTEN IN WET OR VERY DUSTY CONDITIONS.

SEE YOUR OWNER'S MANUAL. 7074214

DAILY PRE-RIDE INSPECTION

Inspect your ATV each time before riding to ensure it is in proper working order. If proper inspection is not done, severe injury or death could result.

⚠ WARNING

If a proper inspection is not performed serious injury or death can result.

Always inspect your ATV before riding following the checklist carefully.

Before riding your vehicle, inspect all operating controls and parts.

Item/Inspection Procedure

1. Tires - check condition and pressures
2. Fuel and oil tanks - fill both tanks to their proper levels
3. All brakes - check operation, adjustment and fluid level (includes auxiliary brake)
4. Throttle - check for free operation and closing
5. Headlight/Taillight/Brakelight - check operation of all indicator lights and switches
6. Engine stop switch - check for proper function
7. Wheels - check for tightness of wheel nuts and axle nuts; check that axle nuts are secured by cotter pins
8. Drive chain - condition and slack; refer to drive chain adjustment
9. Air cleaner element - check for dirt; clean or replace
10. Steering - check for free operation noting any unusual looseness in any area
11. Loose parts - visually inspect vehicle for any damaged or loose nuts/bolts or fasteners
12. Operators helmet, goggles and clothing
13. Engine coolant - (Liquid Cooled Models Only) check for proper level at the recovery bottle

OPERATION WARNINGS

⚠ WARNING

POTENTIAL HAZARD

Operating this ATV without proper instruction.

WHAT CAN HAPPEN

The risk of an accident is greatly increased if the operator does not know how to operate the ATV properly in different situations and on different types of terrain.

HOW TO AVOID THE HAZARD

Beginning and inexperienced operators should complete the certified training course offered by Polaris Industries Inc. They should then regularly practice the skills learned in the course and the operating techniques described in the Owner's Manual.

For more information about the training course, contact an authorized ATV dealer or call Polaris at 1-800-342-3764.

⚠ WARNING

POTENTIAL HAZARD

Failure to follow the age recommendations for this ATV.

WHAT CAN HAPPEN

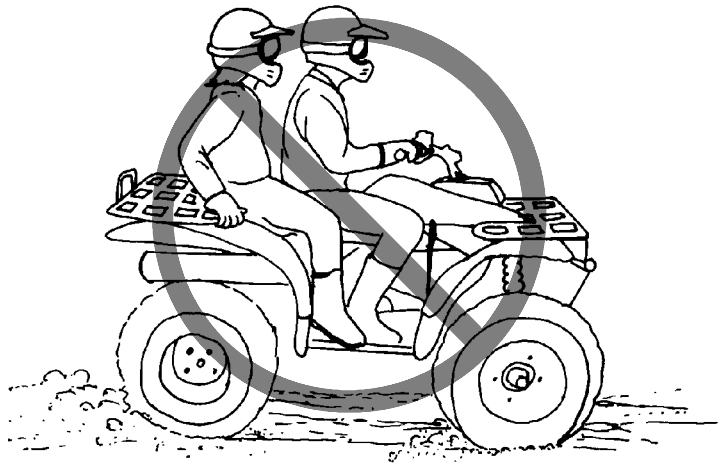
Use by children of ATVs that are not recommended for their age can lead to severe injury or death of the child.

Even though a child may be within the age group for which some ATVs are recommended, he or she may not have the skills, abilities, or judgment needed to operate the ATV safely and may be involved in a serious accident.

HOW TO AVOID THE HAZARD

No one under 18 should operate a Polaris ATV.

⚠ WARNING



POTENTIAL HAZARD

Carrying a passenger on this ATV.

WHAT CAN HAPPEN

Greatly reduces your ability to balance and control this ATV.

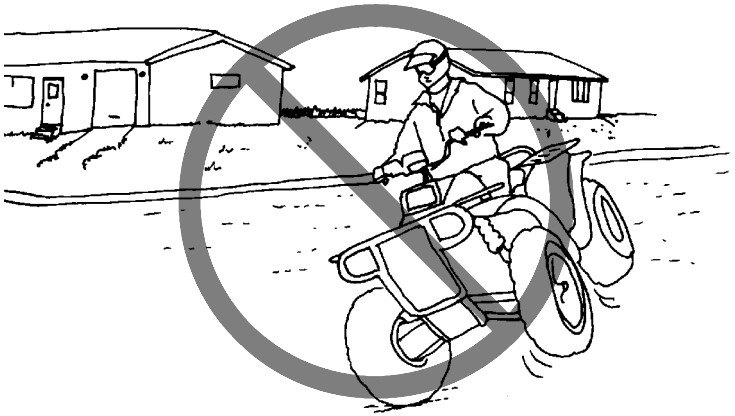
Could cause an accident, resulting in harm to you and/or your passenger.

HOW TO AVOID THE HAZARD

Never carry a passenger. The long seat is to allow the operator to shift position as needed during operation. It is not for carrying passengers.

OPERATION WARNINGS

⚠ WARNING



POTENTIAL HAZARD

Operating this ATV on paved surfaces.

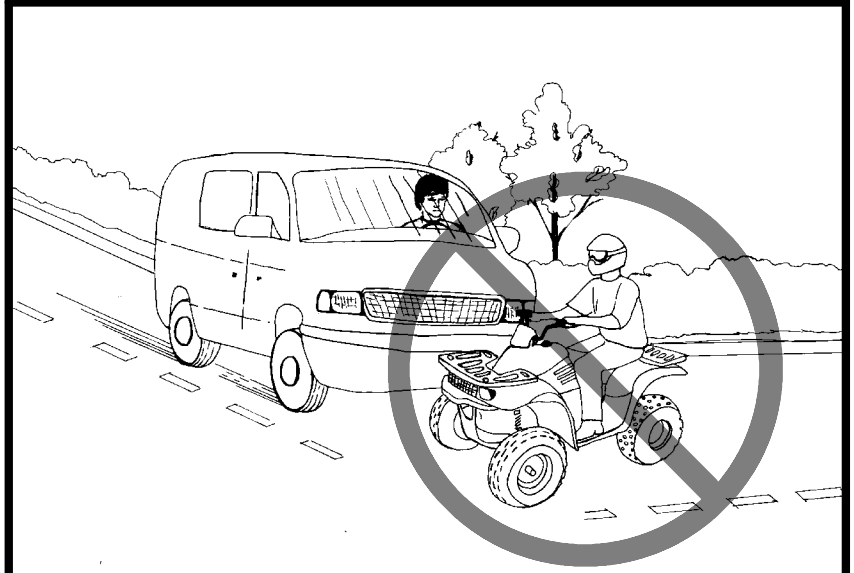
WHAT CAN HAPPEN

The ATV's tires are designed for off-road use only; not for use on pavement. Paved surfaces may seriously affect handling and control of the ATV, and may cause the vehicle to go out of control.

HOW TO AVOID THE HAZARD

Never operate the ATV on any paved surfaces, including sidewalks, driveways, parking lots and streets.

⚠ WARNING



POTENTIAL HAZARD

Operating this ATV on public streets, roads or highways.

WHAT CAN HAPPEN

You can collide with another vehicle.

HOW TO AVOID THE HAZARD

Never operate this ATV on any public street, road or highway, even a dirt or gravel one.

In many states it is illegal to operate ATVs on public streets, roads and highways.

OPERATION WARNINGS

⚠ WARNING

POTENTIAL HAZARD

Operating this ATV without wearing an approved helmet, eye protection and protective clothing.

WHAT CAN HAPPEN

Operating without an approved helmet increases your chances of a severe head injury or death in the event of an accident.

Operating without eye protection can result in an accident and increases your chances of a severe injury in the event of an accident.

HOW TO AVOID THE HAZARD

Always wear an approved helmet which fits properly.

You should also wear:

- eye protection (goggles or face shield);
- gloves;
- boots;
- long-sleeved shirt or jacket; and
- long pants.

⚠ WARNING

POTENTIAL HAZARD

Operating this ATV after consuming alcohol or drugs.

WHAT CAN HAPPEN

Could seriously affect your judgment.

Could cause you to react more slowly.

Could affect your balance and perception.

Could result in an accident.

HOW TO AVOID THE HAZARD

Never consume alcohol or drugs before or while driving this ATV.

⚠ WARNING

POTENTIAL HAZARD

Operating this ATV at excessive speeds.

WHAT CAN HAPPEN

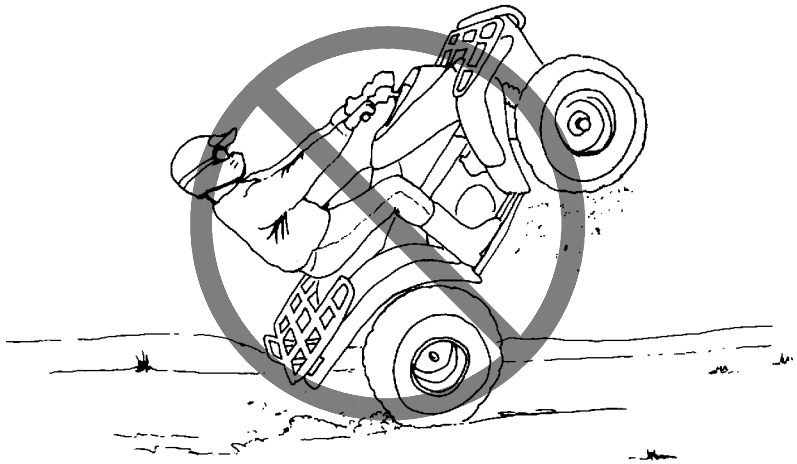
Increases your chances of losing control of the ATV, which can result in an accident.

HOW TO AVOID THE HAZARD

Always travel at a speed which is proper for the terrain, visibility and operating conditions; and your experience.

OPERATION WARNINGS

⚠ WARNING



POTENTIAL HAZARD

Attempting wheelies, jumps and other stunts.

WHAT CAN HAPPEN

Increases the chance of an accident, including an overturn.

HOW TO AVOID THE HAZARD

Never attempt stunts, such as wheelies or jumps. Don't try to show off.

⚠ WARNING

POTENTIAL HAZARD

Failure to inspect the ATV before operating.

Failure to properly maintain the ATV.

WHAT CAN HAPPEN

Increases the possibility of an accident or equipment damage.

HOW TO AVOID THE HAZARD

Always inspect your ATV each time you use it to make sure the ATV is in safe operating condition.

Always follow the inspection and maintenance procedures and schedules described in the Owner's Manual.

⚠ WARNING

POTENTIAL HAZARD

Removing hands from handlebars or feet from footrests during operation.

WHAT CAN HAPPEN

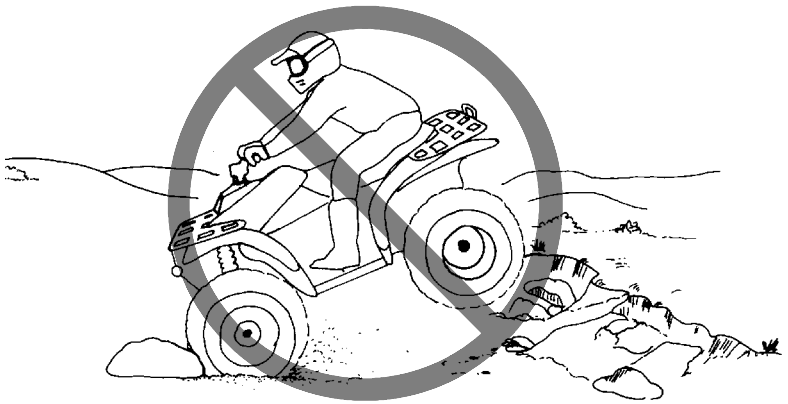
Removing even one hand or foot can reduce your ability to control the ATV or could cause you to lose your balance and fall off the ATV. If you remove a foot from the footrest, your foot or leg may come into contact with the rear wheels, which could injure you or cause an accident.

HOW TO AVOID THE HAZARD

Always keep both hands on the handlebars and both feet on the footrests of your ATV during operation.

OPERATION WARNINGS

⚠ WARNING



POTENTIAL HAZARD

Failure to use extra care when operating this ATV on unfamiliar terrain.

WHAT CAN HAPPEN

You can come upon hidden rocks, bumps, or holes, without enough time to react.

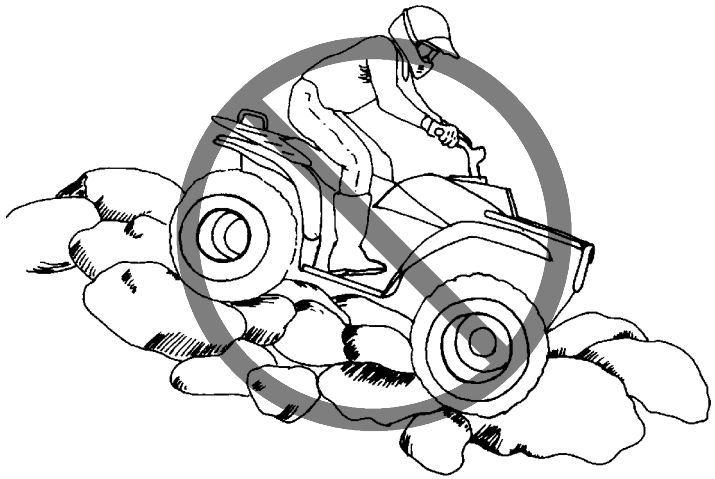
Could result in the ATV overturning or going out of control.

HOW TO AVOID THE HAZARD

Go slowly and be extra careful when operating on unfamiliar terrain.

Always be alert to changing terrain conditions when operating the ATV.

⚠ WARNING



POTENTIAL HAZARD

Failure to use extra care when operating on excessively rough, slippery or loose terrain.

WHAT CAN HAPPEN

Could cause loss of traction or vehicle control, which could result in an accident, including an overturn.

HOW TO AVOID THE HAZARD

Do not operate on excessively rough, slippery or loose terrain until you have learned and practiced the skills necessary to control the ATV on such terrain.

Always be especially cautious on these kinds of terrain.

OPERATION WARNINGS

⚠ WARNING

POTENTIAL HAZARD

Turning improperly.

WHAT CAN HAPPEN

ATV could go out of control, causing a collision or overturn.

HOW TO AVOID THE HAZARD

Always follow proper procedures for turning as described in the Owner's Manual. See page 63 .

Practice turning at low speeds before attempting to turn at faster speeds.

Do not turn at excessive speed.

⚠ WARNING

POTENTIAL HAZARD

Operating on excessively steep hills.

WHAT CAN HAPPEN

The vehicle can overturn more easily on extremely steep hills than on level surfaces or small hills.

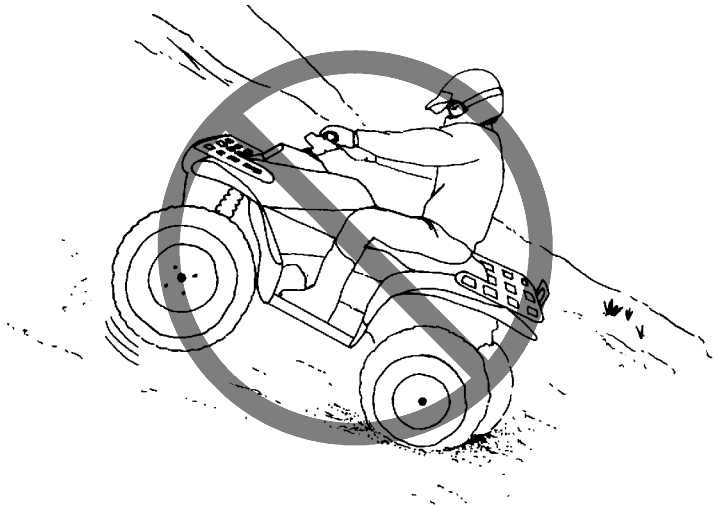
HOW TO AVOID THE HAZARD

Never operate the ATV on hills too steep for the ATV or for your abilities.

Practice on smaller hills before attempting large hills.

Never operate ATV on hills steeper than 25°.

⚠ WARNING



POTENTIAL HAZARD

Climbing hills improperly.

WHAT CAN HAPPEN

Could cause loss of control or cause ATV to overturn.

HOW TO AVOID THE HAZARD

Always follow proper procedures for climbing hills as described in the Owner's Manual. See pages 65 through 68.

Always check the terrain carefully before you start up any hill.

Never climb hills with excessively slippery or loose surfaces.

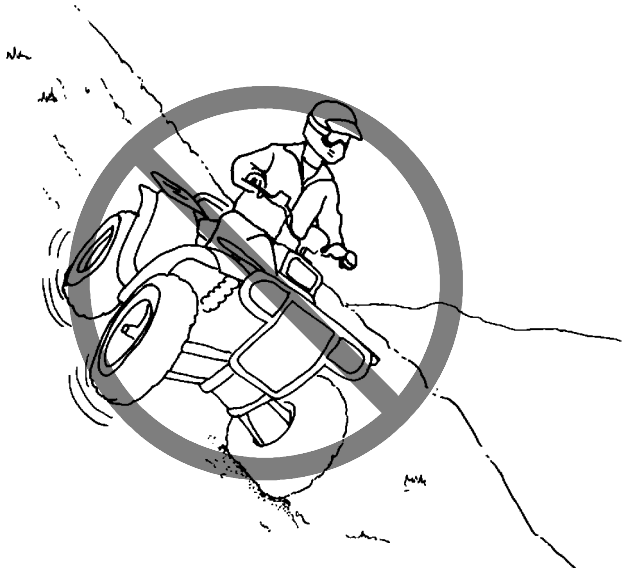
Shift your weight forward.

Never open the throttle suddenly. The ATV could flip over backwards.

Never go over the top of any hill at high speed. An obstacle, a sharp drop, or another vehicle or person could be on the other side of the hill.

OPERATION WARNINGS

⚠ WARNING



POTENTIAL HAZARD

Going down a hill improperly.

WHAT CAN HAPPEN

Could cause loss of control or cause ATV to overturn.

HOW TO AVOID THE HAZARD

Always follow proper procedures for going down hills as described in the Owner's Manual. See page 67. **NOTE:** A special technique is required when braking as you go downhill.

Always check the terrain carefully before you start down any hill.

Shift your weight backward.

Never go down a hill at high speed.

Avoid going down a hill at an angle which would cause the vehicle to lean sharply to one side. Go straight down the hill where possible.

⚠ WARNING

POTENTIAL HAZARD

Improperly crossing hills or turning on hills.

WHAT CAN HAPPEN

Could cause loss of control or cause ATV to overturn.

HOW TO AVOID THE HAZARD

Never attempt to turn the ATV around on any hill until you have mastered the turning technique as described in the Owner's Manual on level ground. See page 68. Be very careful when turning on any hill.

Avoid crossing the side of a steep hill if possible.

When crossing the side of a hill:

Always follow proper procedures as described in the Owner's Manual.

Avoid hills with excessively slippery or loose surfaces.

Shift your weight to the uphill side of the ATV.

OPERATION WARNINGS

⚠ WARNING

POTENTIAL HAZARD

Stalling, rolling backwards or improperly dismounting while climbing a hill.

WHAT CAN HAPPEN

Could result in ATV overturning.

HOW TO AVOID THE HAZARD

Maintain steady speed when climbing a hill.

If you lose all forward speed:

Keep weight uphill.

Apply the brakes.

Lock parking brake after you are stopped.

If you begin rolling backwards:

Keep weight uphill; never apply engine power.

Never apply the rear brake while rolling backwards.

Apply the single-lever brake gradually.

When fully stopped, apply rear brake as well, and then lock parking brake.

Dismount on uphill side, or to either side if pointed straight uphill.

Turn the ATV around and remount, following the procedure described in the Owner's Manual. See page 68.

⚠ WARNING

POTENTIAL HAZARD

Improperly operating over obstacles.

WHAT CAN HAPPEN

Could cause loss of control or a collision. Could cause the ATV to overturn.

HOW TO AVOID THE HAZARD

Before operating in a new area, check for obstacles.

Use extreme caution when riding over large obstacles, such as large rocks or fallen trees.

If you cannot avoid obstacles, always follow proper procedures as described in the Owner's Manual.

⚠ WARNING

POTENTIAL HAZARD

Skidding or sliding.

WHAT CAN HAPPEN

You may lose control of the ATV.

You may also regain traction unexpectedly, which may cause the ATV to overturn.

HOW TO AVOID THE HAZARD

On slippery surfaces, such as ice, go slowly and be very cautious in order to reduce the chance of skidding or sliding out of control.

⚠ WARNING

POTENTIAL HAZARD

Riding on frozen lakes and rivers.

WHAT CAN HAPPEN

Severe injury or death can result if the ATV and/or the operator break through the ice.

HOW TO AVOID THE HAZARD

Never ride your ATV on a frozen body of water before you are sure the ice is thick enough and sound enough to support the machine and its operator, as well as the force that is created by a moving vehicle.

OPERATION WARNINGS

⚠ WARNING

POTENTIAL HAZARD

Operating this ATV through deep or fast flowing water.

WHAT CAN HAPPEN

Tires may float, causing loss of traction and loss of control, which could lead to an accident.

HOW TO AVOID THE HAZARD

Never operate this ATV in fast flowing water or in water deeper than that specified in your Owner's Manual. See page 69.

Remember that wet brakes may have reduced stopping ability. Test your brakes after leaving water. If necessary, apply them several times to let friction dry out the pads.

⚠ WARNING

POTENTIAL HAZARD

Improperly operating in reverse.

WHAT CAN HAPPEN

You could hit an obstacle or person behind you, resulting in serious injury.

HOW TO AVOID THE HAZARD

When you select reverse gear, make sure there are no obstacles or people behind you. When it is safe to proceed, go slowly.

⚠ WARNING

POTENTIAL HAZARD

Operating this ATV with improper tires, or with improper or uneven tire pressure.

WHAT CAN HAPPEN

Use of improper tires on this ATV, or operation of this ATV with improper or uneven tire pressure, may cause loss of control, and increases the risk of an accident.

HOW TO AVOID THE HAZARD

Always use the size and type tires specified in the Owner's Manual Supplement for this vehicle.

Always maintain proper tire pressure as described in the Owner's Manual Supplement.

⚠ WARNING

POTENTIAL HAZARD

Operating this ATV with improper modifications.

WHAT CAN HAPPEN

Improper installation of accessories or modification of this vehicle may cause changes in handling which in some situations could lead to an accident.

HOW TO AVOID THE HAZARD

Never modify this ATV through improper installation or use of accessories. All parts and accessories added to this vehicle should be genuine Polaris Industries Inc. or equivalent components designed for use on this ATV; and should be installed and used according to instructions. If you have questions, consult an authorized Polaris ATV dealer.

OPERATION WARNINGS

⚠ WARNING

POTENTIAL HAZARD

Overloading this ATV or carrying or towing cargo improperly.

WHAT CAN HAPPEN

Could cause changes in vehicle handling which could lead to an accident.

HOW TO AVOID THE HAZARD

Never exceed the stated load capacity for this ATV.

Cargo should be properly distributed and securely attached.

Reduce speed when carrying cargo or pulling a trailer. Allow greater distance for braking.

Always follow the instructions in the Owner's Manual for carrying cargo or pulling a trailer. See pages 59 and 60.

⚠ WARNING

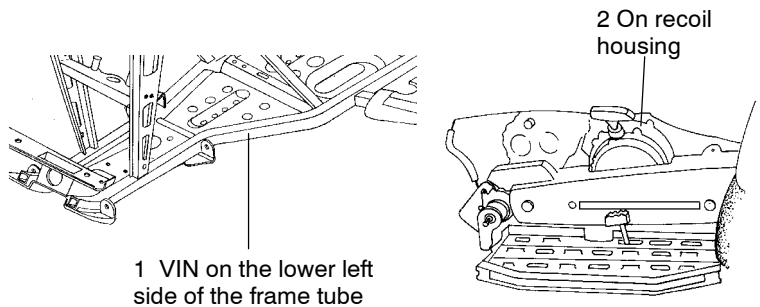
After a rollover or an accident, have a qualified service dealer check the complete machine including, but not limited to, brakes, throttle and steering for possible damage.

⚠ WARNING

Safe operation of this rider active vehicle requires good judgement and physical skills. Persons with cognitive or physical disabilities who operate this vehicle have an increased risk of overturns and loss of control which could result in serious injury or death.

CAUTION: Keep combustible materials away from exhaust system. Fire may result.

VEHICLE IDENTIFICATION NUMBERS



Important: Record these numbers from your ATV in the spaces provided.

1. Frame VIN

2. Engine Serial Number (Right front side of engine crankcase)

Remove the spare key and store in a safe place. Record your ignition key number here. It is a four digit number found stamped on the key. In the event the key is lost, replacement can be made by supplying your dealer with this number.

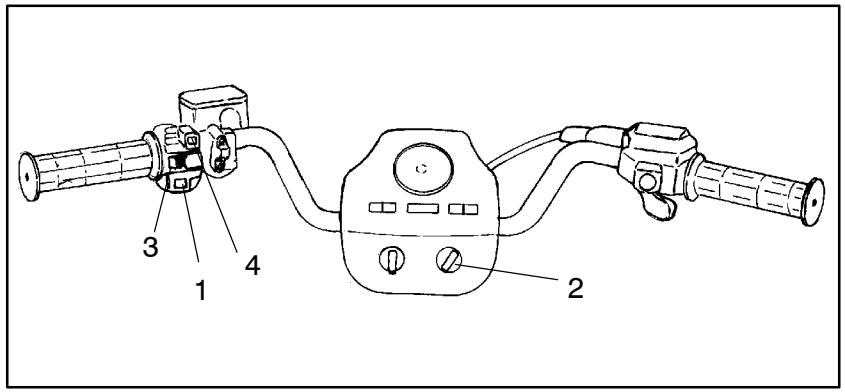
Ignition Key Number

The vehicle frame and engine serial numbers are important for model identification when registering your vehicle, obtaining insurance or whenever replacement parts are required. In the event your vehicle were stolen these numbers are essential to the recovery and identification of your ATV.

Dealer Imprint

CONTROL AND PARTS FUNCTIONS

Engine Electrical Switches



1. Override Switch (Reverse Speed Limiter) - This vehicle is equipped with a reverse speed limiter system. To obtain additional power while backing up, depress the override button. **WARNING:** Never activate the override button while throttle is open as loss of control may result, causing severe personal injury or death.

NOTE: The override switch also allows activation of Demand 4 Drive (All Wheel Drive) in reverse, if Demand 4 Drive switch is on.

2. Main Switch - This switch must be turned clockwise to the “on” position to start the engine.

3. Emergency Engine Stop Switch - The engine will not start or run when the switch is in its “off” position. Its purpose is to provide the operator with a quick means of engine shutdown in case of stuck throttle or other emergency.

NOTE: Both the main switch and the emergency engine stop switch shut off all electrical power to the entire vehicle including lights.

4. Engine Start Button - Press to start the engine.

⚠ WARNING

Backing your ATV can be dangerous!

You could hit an obstacle or person behind you; or the vehicle could tip over rearward on a steep incline causing severe injury or death.

Always back slowly avoiding excessive speed and do not use the reverse speed override switch system unless additional power is required for vehicle movement.

Avoid backing on steep inclines.

Avoid turning at sharp angles in reverse.

Light Switches and Indicator Lights

Switches

Each Polaris ATV has a main switch. It is located on the right hand side of the machine and operated with a key.

The light switch is located on the left hand handlebar. In addition to turning the lights on and off, it also switches the lights from Hi to Lo on models equipped with Hi-Lo beams. **NOTE:** Will not light unless the main switch is on.

Indicator Lights

Each Polaris ATV has indicator lights. The configuration of these lights differs with individual models and not every model is equipped with all the lights. The information in your Owner's Manual Supplement and in the following box will help you identify the lights on your machine and their function.

Transmission Neutral indicator - Green

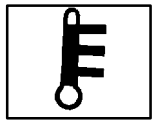
N

Transmission Reverse indicator - Yellow

R

All Wheel Drive Indicator - Red
(Refer to page 43 for location)

Engine Hi Temp Warning Indicator



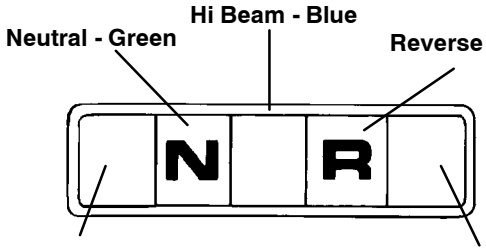
Low Oil Warning Light (Red)

High Beam Indicator (Blue)

HI BEAM

OR

If your machine has the following light configuration, use this diagram to determine indicator light location and function.



Hi Temp Warning - Red (will light only if engine overheats)

Low Oil Warning Light - Red

CONTROL AND PARTS FUNCTIONS

With engine running, verify function of indicator lights each time ATV is used.

⚠ WARNING

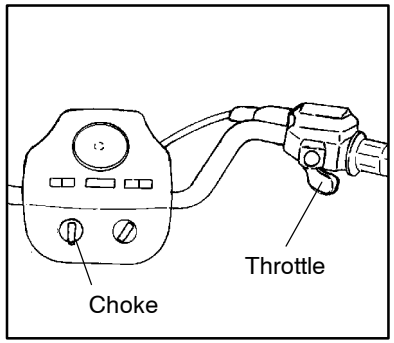
This ATV is not equipped with highway approved lighting. This ATV is designed for off-road use only and must not be ridden on streets or highways. Use caution and drive at reduced speeds in conditions of reduced visibility such as fog, rain and darkness.

NOTE: The taillight is on whenever the main switch (key) is in the on position. Turn the key off to prevent battery drain.

⚠ WARNING	indicates a potential hazard which could result in serious injury or death.

Engine Throttle and Choke

Throttle Lever



Engine speed and vehicle movement are controlled by pressing the throttle lever. The throttle lever is spring loaded and engine speed returns to idle when the lever is released. This vehicle is equipped with a Polaris Electronic Throttle Control (ETC) which is designed to reduce the risk of a frozen or stuck throttle. In the event the throttle should stick in an open position, engine RPM will diminish and power to the rear wheels will cease when the operator releases the throttle lever.

Choke Lever

Refer to the engine starting procedure on page 55 for correct choke and throttle settings during starting.

⚠ WARNING

The Electronic Throttle Control (ETC) limits engine power in the event of a throttle system malfunction and is provided for your safety. Do not attempt to modify the ETC system or replace it with any after market throttle mechanisms.

⚠ WARNING

Do not start or operate an ATV with sticking or improperly operating throttle controls. A stuck or improperly operating throttle could cause an accident resulting in severe injury or death.

Always contact your dealer for service repairs whenever throttle problems arise.

Failure to check or maintain proper operation of the throttle system can result in the throttle lever sticking during riding and cause an accident.

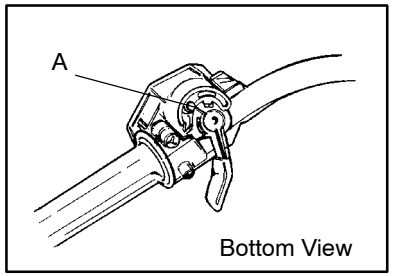
Always check the lever for free movement and return before starting the engine and occasionally during riding.

CONTROL AND PARTS FUNCTIONS

Throttle Control/Brakes

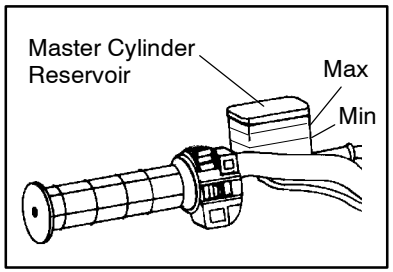
Throttle Control Lever Stop

The throttle control lever incorporates an adjustable stop. This can be adjusted to limit the amount of throttle opening by loosening the screw (A) and sliding the stop to a desired setting. Then tighten screw.



Front and Rear Brakes

The brake fluid in the master cylinder, which is located on the left handlebar, should be checked before each ride. The fluid level can be seen through the plastic reservoir, and should be maintained between the indicated max and min marks on the reservoir. **NOTE:** When checking the fluid level, the ATV must be on level ground the the handlebars straight. If the fluid level is low add DOT 3 (PN 2870990) only.



WARNING: Once a bottle of brake fluid is opened, use what is necessary and discard the rest. Do not store or use a partial bottle of brake fluid. Brake fluid is hygroscopic, meaning it rapidly absorbs moisture from the air. This causes the boiling temperature of the brake fluid to drop, which can lead to early brake fade and the possibility of serious injury.

The front and rear brakes are applied by squeezing the left side brake lever toward the handlebar. The front and rear brakes are hydraulically activated disc type brakes which are activated by one lever only.

Always test brake lever travel and reservoir fluid level before riding. When squeezed, the lever should feel firm. Any sponginess would indicate a possible fluid leak or low master cylinder fluid level which must be corrected before riding. Contact your dealer for proper diagnosis and repairs.

⚠ WARNING

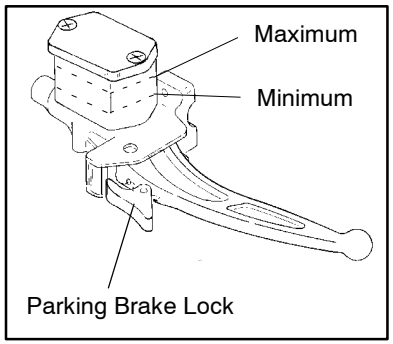
Improperly operating the ATV with a spongy brake lever can result in loss of braking. Loss of braking could cause an accident.

Never operate the ATV with a spongy feeling brake lever.

Parking Brake

Setting the Parking Brake

1. Squeeze the left hand brake lever two or three times and hold it.
2. Rotate the park brake lock into the notches on the master cylinder body. Release the brake lever.
3. To release the parking brake lock, squeeze the brake lever. It will return to its released position.



⚠ WARNING

Always check to be sure that the parking brake has been disengaged before operating the ATV. An accident could result if the parking brake is left on while the ATV is operated.

The parking brake may relax when left on for a long period of time. This could cause an accident.

Do not leave the vehicle on a hill depending on the parking brake for more than five minutes.

Always block the downhill side of the wheels if leaving the ATV on a hill or park the ATV in a side hill position.

Auxiliary Power Outlet

Auxiliary power outlets provide 12V power for operating accessories such as hand held spot lights.

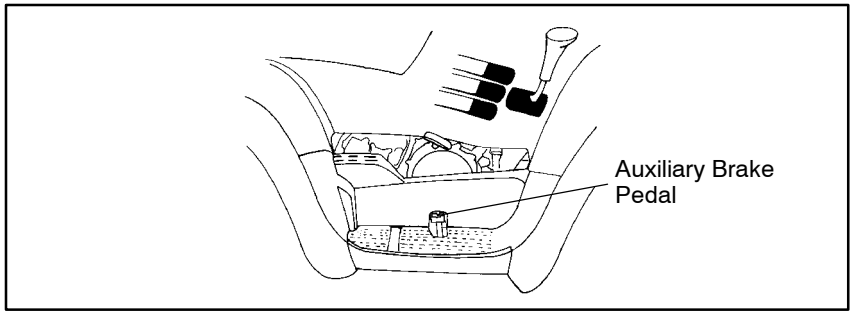
Outlets are located on the front headlight pod and/or rear taillight bracket.

Do not use front and rear outlets simultaneously as increased battery drain will result.

To determine if your vehicle is equipped with auxiliary power outlets, please check your Owner's Manual Supplement.

CONTROL AND PARTS FUNCTIONS

Auxiliary Mechanical Brake



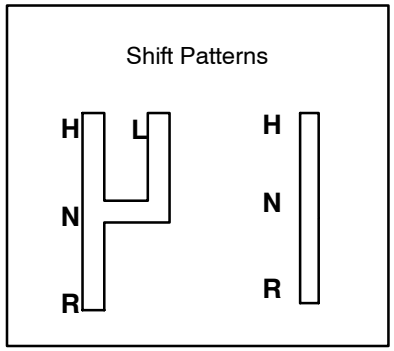
Your Polaris ATV has an auxiliary mechanical brake provided as a safety feature. It is located on the inside of the right floor board and is operated by the right foot. It is intended as a backup to the hydraulic brake system, especially if the hydraulic system becomes inoperative.

WARNING: Use caution when applying the auxiliary mechanical brake. Do not aggressively apply the auxiliary brake when going forward or the rear wheels may skid and slide sideways causing loss of control. If the rear wheels slide, reduce brake pedal pressure to brake the rear wheels without skidding. Aggressively applying the rear brake when backing down a hill may cause rear tip over.

The auxiliary brake system is mechanical and requires periodic adjustment. If adjustment is necessary, please refer to page 106.

Transmission Gear Selector Operation

Shift patterns depend on the type of vehicle you own. Please check your Owner's Manual Supplement to define your machine's shift pattern.



The transmission gear selector is located on the right side of the vehicle directly above and forward of the engine recoil starter. The transmission selector lever has three or four positions: high forward; reverse; neutral; and low forward or forward; reverse; and neutral. Check your Owner's Manual Supplement for specification.

Use of low forward gear is recommended in heavy pulling situations to extend belt life.

To change gears, stop the vehicle and with the engine idling, move the lever to the desired gear. Do not attempt to shift gears with engine speed above idle or while the vehicle is moving.

Always place the transmission in gear with the parking brake locked whenever the vehicle is left unattended.

Maintaining shift linkage adjustment is important to assure proper transmission function. Should you experience any shifting problem see your dealer.

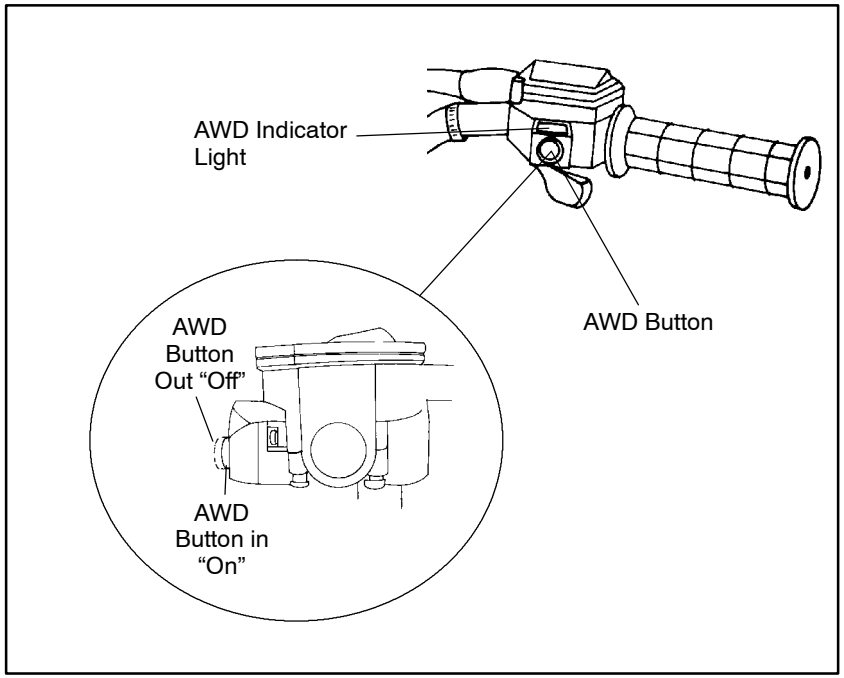
⚠ WARNING

1. Do not attempt to shift the transmission while the vehicle is moving or while operating on hilly terrain.
2. Always place the transmission in gear with the parking brake applied and turn the vehicle off whenever the vehicle is left unattended.

CONTROL AND PARTS FUNCTIONS

Demand 4 Drive

(Found on models with All Wheel Drive)



Exclusive Demand 4 Drive System (All Wheel Drive)

This Polaris AWD is equipped with a unique, Polaris exclusive, Demand 4 Drive (AWD) system which is activated by a switch on the right handlebar. When the switch is "off" the 4x4 is in 2 wheel drive at all times. When the switch is "on" the 4x4 is in Demand 4 Drive and the front wheels will automatically engage anytime the rear wheels lose traction. When the rear wheels regain traction, the front wheels will automatically disengage. **NOTE:** The override switch also allows activation of Demand 4 Drive (AWD) in reverse, if Demand 4 Drive switch is on.

The AWD button position and a red AWD light indicates when the vehicle is in Demand 4 Drive. There is no limit to the length of time the vehicle may remain in Demand 4 Drive.

The Demand 4 Drive switch may be turned on or off while the vehicle is moving. If the switch is turned off when the front hubs are driving they will not release until the rear wheels regain traction.

CAUTION: Do not switch on Demand 4 Drive if the rear wheels are spinning. This may cause severe drive shaft and clutch damage. Engage the Demand 4 Drive switch before getting into conditions where front wheel drive may be needed. If the rear wheels are spinning, release the throttle before turning the Demand 4 Drive switch on.

Disengaging Wheel Hubs

When backing uphill while in Demand 4 Drive and then going forward downhill, one or both hubs may remain engaged. If one or both hubs remain engaged they can be disengaged by stopping, shifting to and moving in reverse. Then proceed in forward again.

You can tell if only one front hub is engaged if the handlebars pull to one side. If both front wheel hubs are engaged, steering effort increases but remains balanced from left to right, and vehicle speed is somewhat restricted.

WARNING: If both hubs were engaged and only one released during operation, loss of control could result. If you experience hub engaging symptoms, use the above disengaging technique before proceeding. Failure to disengage front hubs as directed above could result in severe injury or death.

If the hubs remain engaged after following these instructions return the ATV to your dealer for service.

PVT System

⚠ WARNING

The PVT system rotates at high speeds, creating large amounts of force on clutch components. Extensive engineering and testing has been conducted to insure the safety of this product. However, as the owner you have the following responsibilities to make sure this system remains safe:

- Do not modify any component of the PVT system. Doing so may reduce its strength so that a failure may occur at high speeds. This system has been precision balanced. Any modification will cause the system to be out of balance, creating vibration and additional loads on components.
- Routine maintenance is the responsibility of the owner. Always follow recommended maintenance procedures. See your dealer!
- This PVT system is intended for use on Polaris products only.
- The PVT housing must be securely in place during operation.

Failure to comply with this warning can result in severe injury or death.

CONTROL AND PARTS FUNCTIONS

Engine Cooling System

Coolant Level

The recovery bottle, located on the left side of the machine, must be maintained between the minimum and maximum levels indicated on the recovery bottle.

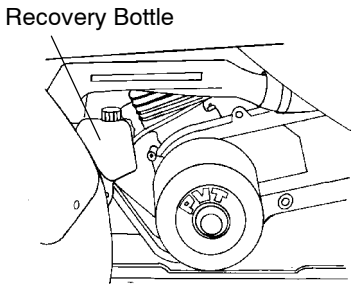
The engine coolant level is controlled or maintained by the recovery system. The recovery system components are the recovery bottle, radiator filler neck, radiator pressure cap and connecting hose.

As coolant operating temperature increases, the expanding (heated) excess coolant is forced out of the radiator past the pressure cap and into the recovery bottle. As engine coolant temperature decreases the contracting (cooled) coolant is drawn back up from the tank past the pressure cap and into the radiator.

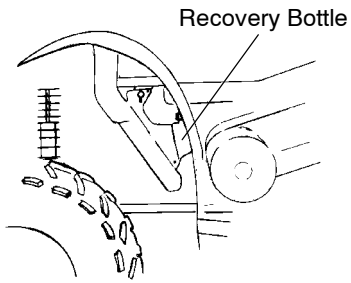
NOTE: Some coolant level drop on new machines is normal as the system is purging itself of trapped air. Observe coolant levels and maintain as recommended by adding coolant to the recovery bottle. Polaris recommends the use of Polaris Premium 60/40 anti-freeze/coolant or a 50/50 mixture of high quality aluminum compatible anti-freeze/coolant and distilled water. **NOTE:** Polaris Premium 60/40 is already premixed and ready to use. Do not dilute with water. **NOTE:** Always follow the manufacturer's mixing recommendations for the freeze protection required in your area.

To access the recovery bottle on Gen IV machines it is necessary to remove the left side panel as described on page 94.

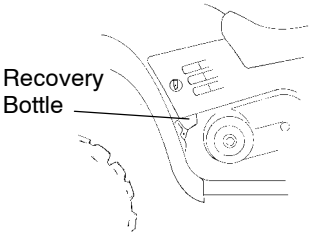
Gen II



Gen III



Gen IV



Engine Cooling System

Radiator Coolant Level Inspection

NOTE: This procedure is only required if the cooling system has been drained for maintenance and/or repair. However, if the recovery bottle has run dry, the level in the radiator should be inspected and coolant added if necessary.

WARNING Never remove the pressure cap when the engine is warm or hot. Escaping steam can cause severe burns. The engine must be cool before removing the pressure cap.

To access the radiator pressure cap:

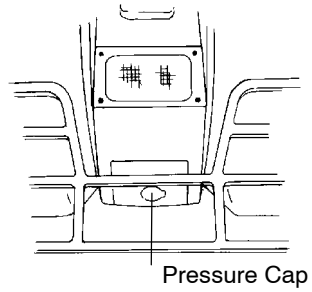
Gen II - To access the pressure cap, remove the access cover on the front of the ATV just below the oil cap. Using a flat, stubby screwdriver loosen the screw 1/4 turn and pull the cover forward and up to remove.

Gen III - To access the pressure cap, clean the area around the oil cap and remove the oil cap (2 cycle models). Remove front cover by placing your fingers under the front of the cover and pulling upward. Reinstall oil cap.

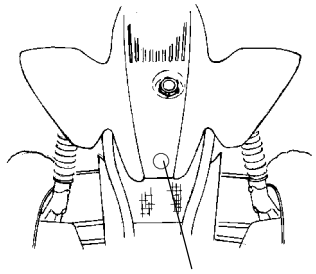
Gen IV - Remove the four screw securing front rack. Remove front cover by placing your fingers under the front of the cover and pulling upward.

NOTE: Use of a non-standard pressure cap will not allow the recovery system to function properly. If the cap should need replacement contact your dealer for the correct replacement part.

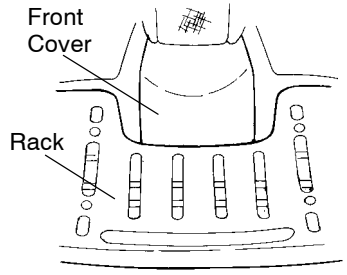
Gen II



Gen III



Gen IV



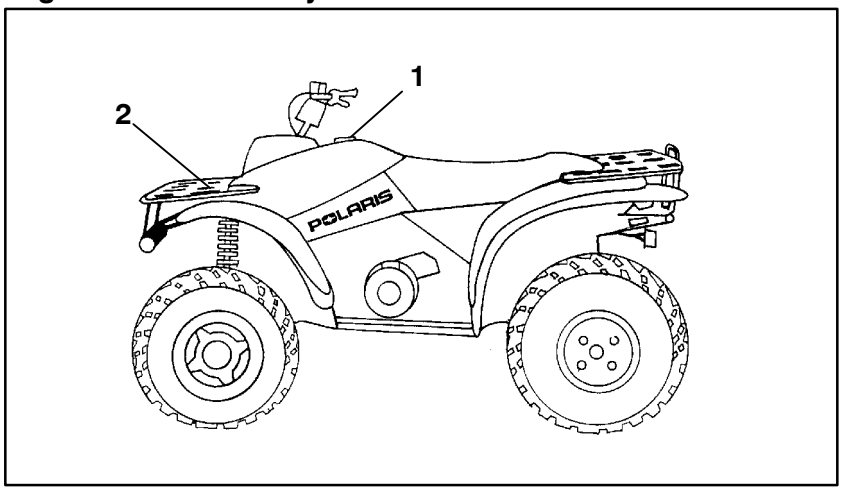
CONTROL AND PARTS FUNCTIONS

Engine Cooling System

To insure that the coolant maintains its ability to protect the engine, it is recommended that the system be completely drained every two years and a fresh mixture of antifreeze and water be added. Polaris recommends the use of Polaris Premium 60/40 anti-freeze/coolant or a 50/50 mixture of high quality aluminum compatible anti-freeze/coolant and distilled water. **NOTE:** Polaris Premium 60/40 is already premixed and ready to use. Do not dilute with water. **IMPORTANT:** Always follow the manufacturer's mixing recommendations for the freeze protection required in your area.

Using a funnel, slowly add coolant as necessary through the radiator filler neck.

Engine Fuel and Oil System



The fuel tank filler cap (1) is located directly behind the handlebar. Refer to your owner's Manual Supplement for tank capacity. Use either leaded or unleaded gasoline with a minimum pump octane number of 87 R+ M/2 octane.

On models with a two cycle engine, the engine oil injection tank filler cap (2) is located on the front of the machine. Refer to you Owner's Manual Supplement to determine the type of engine your vehicle has. The tank capacity is 2 quarts (1.9 l). **CAUTION:** To avoid serious engine damage always top off the oil level when refueling.

CAUTION: On models with a two cycle engine, use only Polaris injection oil. Never substitute or mix oil brands. Serious engine damage and voiding of warranty can result.

The fuel tank supply decal located on the left side of the fuel tank cover displays the three fuel valve positions:

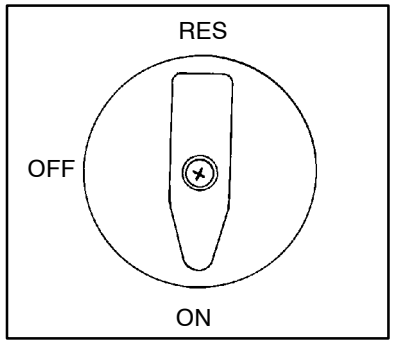
OFF: For vehicle storage and whenever transporting.

ON: For normal operation.

RES: For reserve supply in the event of main supply exhaustion.

NOTE: There is about a 7 to 10 mile (11.2 to 16 km) range on reserve gas. Always refill the gas tank as soon as possible after having used the reserve supply.

Always return valve to "on" position after refueling machine.



CONTROL AND PARTS FUNCTIONS

Engine Fuel Safety/Fuel/Filter

The Polaris ATV is equipped with a unique in-line fuel filter.

This filter should be replaced by your dealer after every 100 hours of operation or annually. Do not attempt to clean the fuel filter.

⚠ WARNING

Gasoline is highly flammable and explosive under certain conditions.

- Always exercise extreme caution whenever handling gasoline.
- Always refuel with the engine stopped and outdoors or in a well ventilated area.
- Do not smoke or allow open flames or sparks in or near the area where refueling is performed or where gasoline is stored.
- Do not over fill the tank. Do not fill the tank neck.
- If you get gasoline on your skin or clothing, immediately wash it off with soap and water and change clothing.
- Never start the engine or let it run in an enclosed area. Gasoline powered engine exhaust fumes are poisonous and can cause loss of consciousness and death in a short time.
- Shut off fuel valve whenever the ATV is stored or parked.

⚠ WARNING

The engine exhaust from this product contains chemicals known to cause cancer, birth defects or other reproductive harm.

4 Cycle Premium 4 Synthetic Lubricant

Polaris Premium 4 All Season Synthetic engine oil has been specially formulated for use in Polaris 4 cycle engines. It is a fully synthetic, high performance, multi-viscosity oil designed to provide the ultimate in lubrication performance and protection.

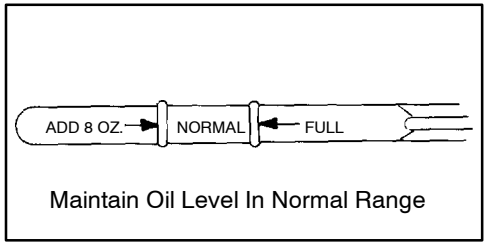
Premium 4 possesses unsurpassed film strength over the widest possible temperature range. It resists viscosity and frictional breakdown in ambient temperatures from -40° F to 120° F. Its exceptional frictional properties result in more efficient operation, more power output and lower fuel consumption.

Although Polaris Premium 4 is the only oil recommended for use in this engine, use of any API certified “SH” oil is allowable. Oil may need to be changed more frequently if Polaris Premium 4 is not used. You will also need to follow the manufacturers recommendations for ambient temperature operation.

Oil System

The oil tank is located on the left side of the vehicle. To check the oil:

1. Set machine on a level surface.
2. Start the engine and let it idle for 20-30 seconds.
3. Stop the engine, remove dipstick and wipe dry with a clean cloth.
4. Screw in the dipstick completely, remove it and read the oil level. **NOTE:** The dipstick must be screwed in to keep the angle and depth of stick consistent.



Maintain Oil Level In Normal Range

5. Remove dipstick and check to see that the oil level is between the full and add marks. Add oil as indicated by the level on the dipstick. Do not overfill.

CAUTION: Use only Polaris Premium 4 All Season synthetic oil (PN 2871271), or API certified “SH” oil. Never substitute or mix oil brands. Serious engine damage and voiding of warranty can result.

Oil and Filter Change

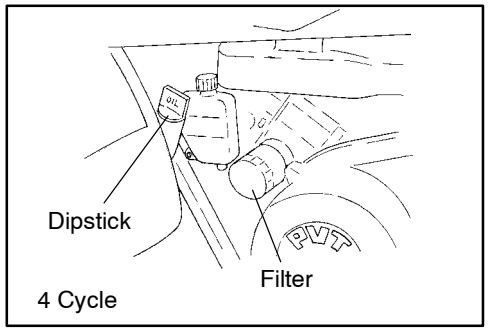
The recommended oil change interval is 100 hours, 1000 miles, or every six months, whichever comes first. Suggested break in oil change is at 20 hours, 500 miles, or one month, whichever comes first. Severe use operation requires more frequent service. Severe use includes continuous duty in dusty or wet conditions, and cold weather riding. **NOTE:** Severe use cold weather riding is all riding below 10° F, and riding between 10° F and 30°F when most trips are slow speed and less than 5 miles. Be sure to change the oil filter whenever changing oil (Polaris PN 3084963)

1. Place vehicle on a level surface.
2. Clean area around drain plug at the bottom of the oil tank.
3. Run engine for two to three minutes until warm. Shut engine off.

CONTROL AND PARTS FUNCTIONS

Oil and Filter Change (Cont.)

4. Place a drain pan beneath the oil tank and remove the drain plug. **CAUTION:** Oil may be hot. Do not allow hot oil to come into contact with skin as serious burns may result.
5. Allow oil to drain completely.
6. Install a new sealing washer (PN 5850135) on oil drain plug. **NOTE:** The sealing surfaces on the drain plug and the oil tank should be clean and free of burrs, nicks or scratches.
7. Reinstall drain plug and torque to 14-17 ft. lbs. (1.93-2.35 kg/m)
8. Place shop towels beneath oil filter. Using an oil filter wrench, turn filter counterclockwise to remove.
9. Using a clean dry cloth, clean filter sealing surface on crankcase.
10. Lubricate O-Ring on new filter with a film of new engine oil. Check to make sure the O-Ring is in good condition. Also make sure the O-ring from the old filter is not still on the engine.
11. Install new filter and tighten by hand 1/2 to 3/4 turn after gasket contact.
12. Approximately 1 cup of engine oil will remain in the crankcase. To drain, remove drain plug found on lower right side of crankcase. **NOTE:** The sealing surfaces on the drain plug and crankcase should be clean and free of burrs, nicks or scratches.
13. Reinstall drain plug.
14. Remove dipstick and add 2 quarts (1.9 l) of Polaris Premium 4 synthetic oil. Reinstall dipstick. **NOTE:** If sump is not drained, add about 1 3/4 quarts initially.
15. Place gear selector in neutral and set parking brake.
16. Start engine and let it idle for one to two minutes. Stop engine and inspect for leaks.



17. Re-check oil level on the dipstick and add oil as necessary to bring the level to the upper mark on the dipstick.
18. Dispose of used filter and oil properly.

Fuel Filter and Oil Filter

Polaris 2 cycle ATVs are equipped with a unique in-line oil filter.

All Polaris ATVs are equipped with a unique in-line fuel filter.

These filters should be replaced by your dealer after every 100 hours of operation or annually. Do not attempt to clean these filters.

Polaris 2-Cycle Lubricants

Polaris has a family of premium oils available for use in all our products and highly recommends their use. The only oils recommended for Polaris 2-cycle ATVs are Polaris Premium 2-cycle oil or Premium Gold Synthetic 2-cycle oil.

CAUTION: Engine warranty coverage may become void if other brands are substituted.

Polaris Premium 2-cycle lubricants are the most advanced formulation of oils specifically designed for today's 2-cycle engines. Months of lab and field tests have resulted in anew generation of 2-cycle lubricants. Polaris Premium 2-cycle lubricants provide additives for 2-cycle engines lacking in today's fuel that keep ring grooves cleaner for less ring sticking and provide improved overall engine cleanliness. With new generation lubricity technology, they excel in meeting the lubrication demands of today's high performance 2-cycle engines. These are optimum oils recommended for liquid cooled and air cooled 2-cycle engines. We believe these oils are the best available in the market today.

Premium Gold Synthetic 2-Cycle Oil

Your vehicle has been primed with Premium Gold Synthetic oil. This lubricant has been specially formulated for low smoke, low odor and high lubricity. We recommend continued use of this oil or Premium 2-cycle oil.

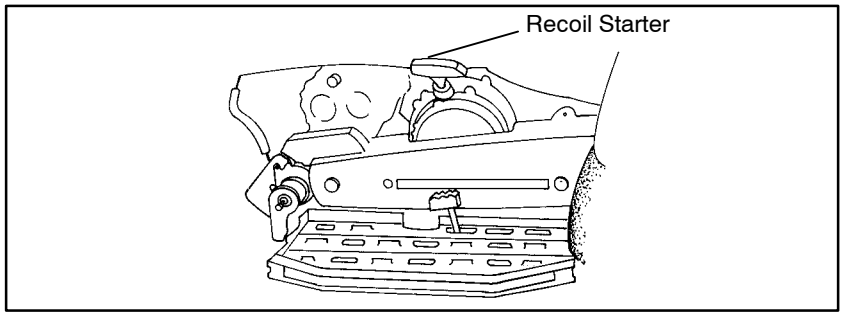
Premium 2-Cycle Oil

Polaris also has a TC-W3 premium oil available for use in all of our products. We highly recommend its use. The only oil recommended for this ATV is Polaris brand oil.

Polaris Premium 2-cycle oils will readily mix with each other, however do not mix Polaris Premium 2-cycle oils with any other oils as they may not be compatible and engine damage may occur.

CONTROL AND PARTS FUNCTIONS

Recoil Starter



If the battery is weak and cannot start the engine, use of the recoil starter located on the right side of the machine will allow vehicle operation until repairs can be made.

Polaris engines are equipped with automatic decompressors. This makes recoil starting possible by allowing compression to “leak” at cranking speeds. The decompressor senses when the engine is spinning fast enough to start and restores compression for starting.

1. Be certain your vehicle is on a level surface and the parking brake is set . See page 40.
2. Take the machine out of gear.
3. Grasp the recoil starter tightly and pull slightly until the starter mechanism engages.
4. Pull the rope abruptly to start the engine. **CAUTION:** Take care not to extend the starter rope so far that it stops, causing damage to the recoil assembly.

CAUTION: Never start the engine with the battery disconnected. Damage to the electrical system and lamps will result.

Drain the recoil housing after operating the ATV in very wet conditions. This should also be done before storing the ATV. The drain screw is located at the bottom of the recoil housing. Remove the screw with a 10mm wrench. Reinstall screw once housing has been drained.

CAUTION: Make sure the manual start handle is fully seated on the recoil housing, especially when travelling in wet areas. If it is not sealed properly, water may enter the recoil housing and damage components.

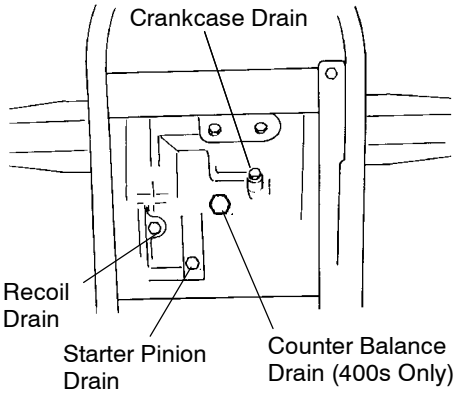
Water will enter the recoil housing if the starter handle is disengaged from the rope guide when under water.

After travelling in wet areas the recoil housing and starter should always be drained completely by removing the recoil.

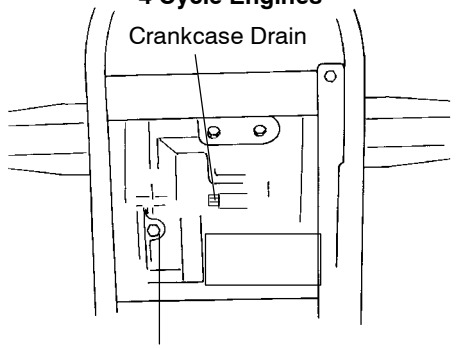
Do not open the crankcase drain unless the engine has ingested water. On 4-cycle engines, some engine oil will be lost if crankcase drain is opened.

On the Trail Blazer, the recoil handle **must be behind the heat shield** for it to seal properly. If it is not sealed properly, water may enter the recoil housing and damage components.

300 and 400 Engines



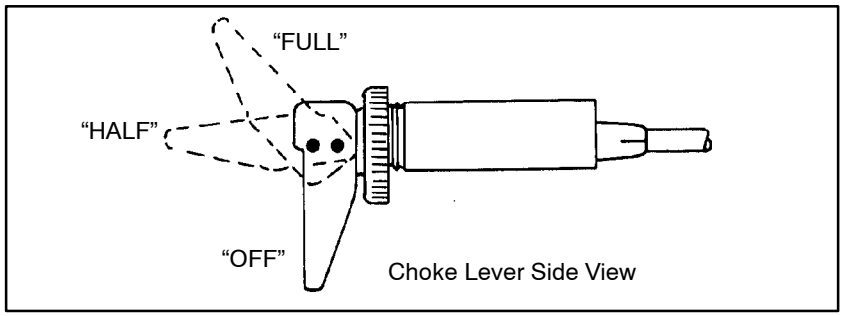
4 Cycle Engines



STARTING THE ENGINE

Procedure for Starting a Cold Engine

1. Place the transmission in neutral and push the vehicle to a level surface.
2. Lock the parking brake.
3. Turn the fuel tank valve to ON.
4. Sit on the vehicle.



Choke Lever Side View

5. Move the choke lever to the FULL position.
6. Turn the ignition key to ON and the engine stop switch to RUN.
7. Press the starter button.
8. Do not press the throttle while starting the engine.
9. Press starter button for five seconds. If engine does not start, release starter button and wait five seconds; then press starter button for another five seconds. Repeat this procedure until engine starts.

NOTE: Do not press the throttle while starting the engine.

After the Engine Starts

1. If the engine slows or stops, use of the choke lever at its HALF position will allow proper engine warm up.
2. Vary the engine RPM slightly with the throttle to aid in warm up until the engine idles smoothly. Then move the choke to OFF.

CAUTION: Proper engine warm up is essential each time before driving to avoid engine damage.

⚠ WARNING

Carbon monoxide exhaust gas is poisonous!

Always start the ATV outdoors.

Never run the engine in an enclosed area.

2 Cycle Engines

The break in period for your new Polaris ATV is defined as the time it takes to use the first tank of gasoline. No single action on your part is as important as a proper break in period. Careful treatment of a new engine will result in more efficient performance and longer life for the engine. Perform the following procedures carefully.

CAUTION: Use only Polaris injection oil. Never substitute or mix oil brands. Serious engine damage and voiding of warranty can result.

1. Mix 12.8 ounces of injection oil to four gallons of gasoline in a suitable gas can. Fill the fuel tank as outlined on pages 48 through 49.
2. Fill the oil tank with Polaris injection oil.
3. Drive slowly at first. Select an area which is open and will give you room to familiarize yourself with vehicle operation and handling.
4. Vary the throttle positions. **CAUTION:** Do not operate at full throttle or high speeds for extended periods during the first three hours of use. Excessive heat can build up and cause damage to close fitted engine parts.
5. Perform regular checks on fluid levels, controls and all important areas on the vehicle as outlined earlier on the daily pre-ride inspection checklist found on page 14.

After the break in period the oil injection system provides the necessary engine lubrication without the need for pre-mixed fuel. **CAUTION:** To avoid serious engine damage always fill the oil tank when refueling the ATV.

After the first tank of pre-mixed fuel has been used please verify that the oil level in the oil tank has dropped, indicating that the oil pump is functioning properly. If the level has not dropped, see your dealer for oil pump bleeding and repeat the pre-mix procedure.

VEHICLE BREAK-IN PERIOD

4 Cycle Engines

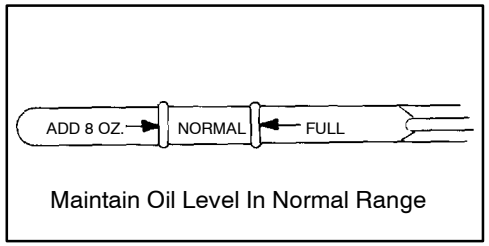
The break in period for your new Polaris ATV is defined as the first ten hours of operation, or the time it takes to use the first two tanks full of gasoline. No single action on your part is as important as a proper break in period. Careful treatment of a new engine will result in more efficient performance and longer life for the engine. Perform the following procedures carefully.

CAUTION: Use only Polaris Premium 4 All Season synthetic oil, or API certified "SH" oil. Never substitute or mix oil brands. Serious engine damage and voiding of warranty can result.

1. Fill fuel tank with either unleaded or leaded fuel which has a minimum pump octane number of 87= (R+ M)/2.

2. Check oil reservoir level indicated on dipstick. Add oil if necessary.

3. Drive slowly at first. Select an area which is open and will give you room to familiarize yourself with vehicle operation and handling.



Maintain Oil Level In Normal Range

4. Vary the throttle positions. Do not operate at sustained idle. **CAUTION:** Do not operate at full throttle or high speeds for extended periods during the first three hours of use. Excessive heat can build up and cause damage to close fitted engine parts.

5. Perform regular checks on fluid levels, controls and all important areas on the vehicle as outlined earlier on the daily pre-ride inspection checklist found on page 14.

6. Pull only light loads.

7. Break in oil and filter. Change at 20 hours or 500 miles.

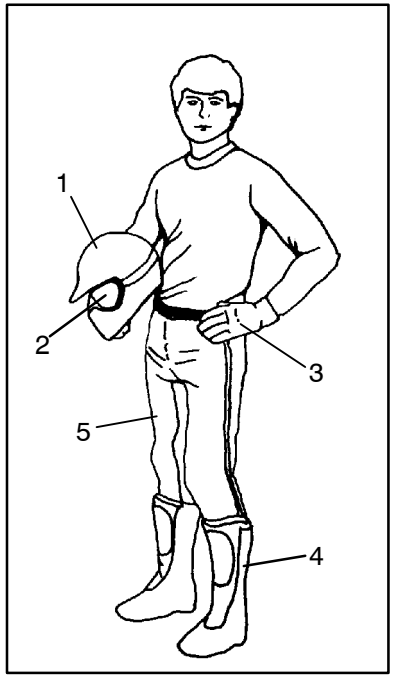
Safe Riding Gear

Always wear clothing suited to the type of riding you are doing. ATV riding requires special protective clothing which will make you feel more comfortable and reduce chances of injury.

1. Helmet

Your helmet is the most important piece of protective gear for safe riding. A helmet can prevent a serious head injury.

Select an approved helmet which meets or exceeds your state's safety standards and bears either the Department of Transportation (DOT) label, the American National Standards Institute label (ANSI z90.1), or the Snell Memorial Foundation label.



2. Eye Protection

Do not depend on sunglasses for proper eye protection. A pair of goggles or helmet face shield offer the best protection for your eyes. They should be kept clean and be of shatterproof design (bearing the markings z2.1 or VESC 8).

3. Gloves

Off-road style gloves with knuckle pads are the best for comfort and protection.

4. Boots

The best footwear is a pair of strong over the calf type boots with heels, such as moto-cross boots.

5. Clothing

To protect your body, long sleeves and pants should always be worn. Riding pants with kneepads, a jersey and shoulder pads provide the best protection.

CARRYING LOADS

Your ATV has been designed to carry a certain amount of load. CARGO WEIGHT should be evenly distributed (1/3 on the front and 2/3 on the rear) and mounted as low as possible. When operating over rough or hilly terrain, reduce speed and cargo to maintain stable driving conditions. Never exceed the following weights.

Model	Total Load Capacity (includes driver & cargo)	Front Rack Cargo Maximum	Rear Rack Cargo Maximum
Sportsman 500	470 lbs. (213 kg)	90 lbs. (41 kg)	180 lbs. (82 kg)
Xplorer 300	470 lbs. (213 kg)	90 lbs. (41 kg)	180 lbs. (82 kg)
Xplorer 400	470 lbs. (213 kg)	90 lbs. (41 kg)	180 lbs. (82 kg)
Xplorer 500	470 lbs. (213 kg)	90 lbs. (41 kg)	180 lbs. (82 kg)
Magnum 2x4	470 lbs. (213 kg)	90 lbs. (41 kg)	180 lbs. (82 kg)
Magnum 4X4	470 lbs. (213 kg)	90 lbs. (41 kg)	180 lbs. (82 kg)
Trail Boss	325 (148 kg)	No Front Rack	125 (57 kg)
Sport 400 L	200 (91 kg)	No Front Rack	No Rear Rack
Trail Blazer	200 (91 kg)	No Front Rack	No Rear Rack
Scrambler 400	200 (91 kg)	No Front Rack	No Rear Rack
Scrambler 500	200 (91 kg)	No Front Rack	No Rear Rack

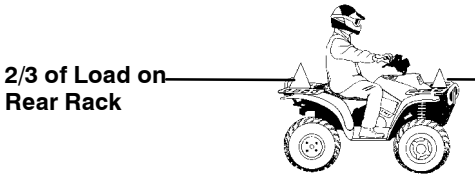
Maximum trailer weight - 850 lbs.(386 kg); maximum vertical hitch weight - 30 lbs.(14 kg). Sportsman 500 may tow up to 1250 (568 kg) on level ground only.

Maximum grade while trailer towing - 15°. Do not tow any trailer on a grade steeper than 15°.

If your machine is equipped with a front rack, take care when loading. Improper loading of the front rack can obstruct the headlight beam, reducing night visibility. Do not obstruct the headlight beam with cargo.

Use of low forward gear is recommended in heavy pulling situations to extend belt life.

CARGO WEIGHT DISTRIBUTION



⚠ WARNING

Correct loading of this vehicle is necessary to maintain proper stability and operating characteristics. Overloading or incorrect positioning of the load affects the vehicle's turning, stopping distance and stability. Failure to follow loading requirements could cause severe injury or death. REDUCE SPEED AND ALLOW GREATER DISTANCE FOR BRAKING WHEN CARRYING CARGO.

CARGO WEIGHT DISTRIBUTION should be 1/3 on the front rack and 2/3 on the rear rack. When operating over rough or hilly terrain, reduce speed and cargo to maintain stable driving conditions. Carrying loads on one rack only increases the possibility of vehicle tip over.

HEAVY LOADS CAN CAUSE BRAKING AND CONTROL PROBLEMS. Use extreme caution when applying brakes with a loaded vehicle. Avoid terrain or situations which may require backing downhill.

ALL LOADS MUST BE SECURED BEFORE MOVING VEHICLE. Unsecured loads can create unstable operating conditions, which could result in loss of control of the vehicle.

LOADS MUST BE CARRIED AS LOW ON THE RACKS AS POSSIBLE. Carrying loads high on the racks raises the center of gravity of the vehicle and creates a less stable operating condition. When cargo loads are carried high on the racks, the weight of the loads must be reduced to maintain stable operating conditions.

OPERATE ONLY WITH STABLE AND SAFELY ARRANGED LOADS. When handling off-centered loads which cannot be centered, securely fasten load and operate with extra caution. Always attach the tow load to the hitch point designated for your ATV.

EXTREME CAUTION MUST BE USED when operating with loads extending over the rack sides. Stability and maneuverability may be adversely affected, causing the machine to overturn.

DO NOT BLOCK THE FRONT HEADLIGHT BEAM when carrying loads on the front rack.

DO NOT TRAVEL FASTER THAN THE RECOMMENDED SPEEDS. Vehicle should never exceed 10 mph (16 kph) while towing a load on a level grass surface. Vehicle speed should never exceed 5 mph (8 kph) when towing loads in rough terrain, while cornering, or while ascending or descending a hill.

DAILY PRE-RIDE INSPECTION

Inspect your ATV each time before riding to ensure it is in proper working order. If proper inspection is not done, severe injury or death could result.

⚠ WARNING

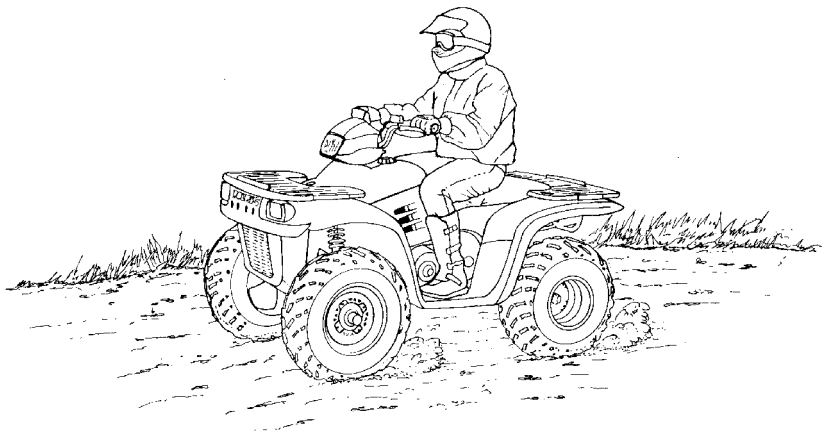
If a proper inspection is not performed serious injury or death can result.

Always inspect your ATV before riding following the checklist carefully.

Before riding your vehicle, inspect all operating controls and parts.

Item/Inspection Procedure

1. Tires - check condition and pressures
2. Fuel and oil tanks - fill both tanks to their proper levels
3. All brakes - check operation, adjustment and fluid level (includes auxiliary brake)
4. Throttle - check for free operation and closing
5. Headlight/Taillight/Brakelight - check operation of all indicator lights and switches
6. Engine stop switch - check for proper function
7. Wheels - check for tightness of wheel nuts and axle nuts; check that axle nuts are secured by cotter pins
8. Drive chain - condition and slack; refer to drive chain adjustment
9. Air cleaner element - check for dirt; clean or replace
10. Steering - check for free operation noting any unusual looseness in any area
11. Loose parts - visually inspect vehicle for any damaged or loose nuts/bolts or fasteners
12. Operators helmet, goggles and clothing
13. Engine coolant - (Liquid Cooled Models Only) check for proper level at the recovery bottle

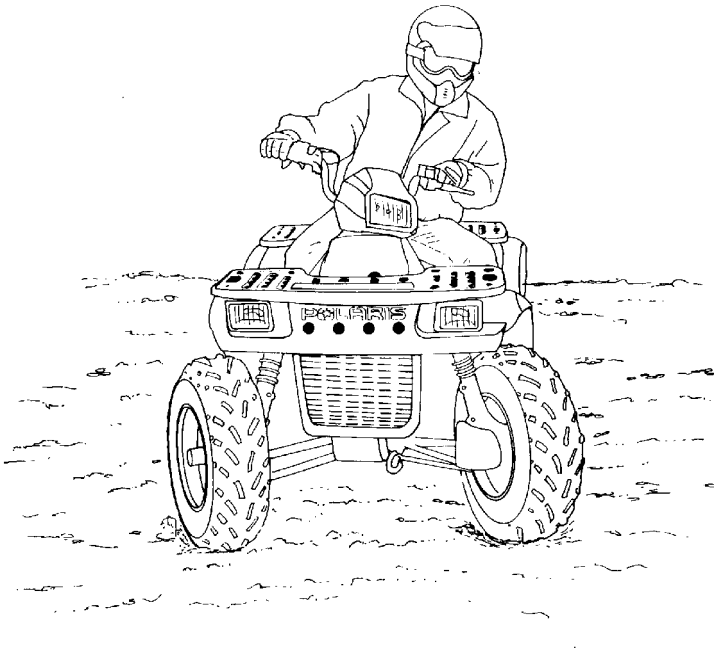


1. Sit upright with both feet on the footrests and both hands on the handlebars.
2. After starting the engine and allowing it to warm up, shift the transmission into gear.
3. Check your surroundings and determine your path of travel.
4. Release the parking brake.
5. Slowly depress the throttle with your right thumb and begin driving. Vehicle speed is controlled by the amount of throttle opening and all transmission shifting is done automatically.
6. Drive slowly, practice maneuvering and using the throttle and brakes on level surfaces.

⚠ WARNING indicates a potential hazard which could result in serious injury or death.

RIDING

Making Turns

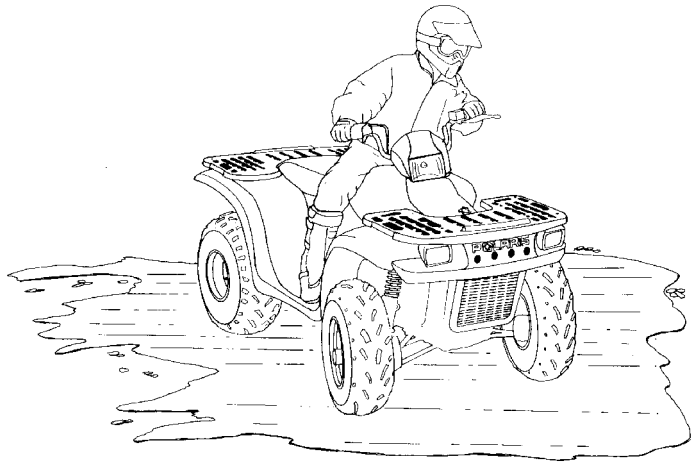


Practice making turns at slow speeds.

Polaris ATVs are equipped with a solid rear axle which drives both rear wheels equally at all times. This means that the wheel on the outside of the turn must travel a greater distance than the inside wheel when turning and the inside tire must slip traction slightly. To turn, steer in the direction of the turn leaning your upper body to the inside of the turn while supporting your weight on the outer footrest. This technique alters the balance of traction between the rear wheels allowing the turn to be made smoothly. The same leaning technique should be used for turning in reverse. **WARNING**: Avoid turning at sharp angles in reverse as tipover and serious injury may result.

⚠ WARNING	indicates a potential hazard which could result in serious injury or death.

Riding On Slippery Surfaces



Whenever riding on slippery surfaces such as wet trails or loose gravel, or during cold freezing weather, special attention must be paid to prevent vehicle turnover. Always:

1. Slow down when entering slippery areas.
2. Maintain a high level of alertness, reading the trail and avoiding quick, sharp turns which can cause skids.
3. Correct a skid by turning the handlebars in the direction of the skid and shifting your body weight forward.
4. Driving with Demand 4 Drive (All Wheel Drive) engaged can assist in controlling the vehicle in slippery areas. **CAUTION:** Never engage Demand Drive while wheels are spinning as severe damage to drive train may occur.

⚠ WARNING

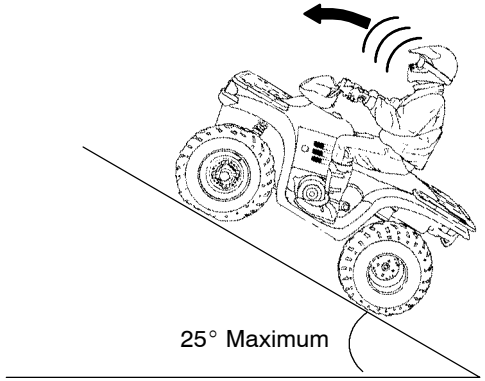
Failure to exercise care when operating the ATV on slippery surfaces can be dangerous.

Loss of tire traction and vehicle control can result in an accident, including an overturn.

- Never apply brakes during a skid. Complete loss of ATV control can result.
- Do not operate on excessively slippery surfaces if possible to avoid.
- Always reduce speed and use additional caution.

RIDING

Traveling Uphill



Whenever traveling uphill always travel straight uphill and:

1. Avoid steep hills.
2. Keep both feet on the footrests.
3. Transfer your weight forward.
4. Proceed at a steady rate of speed and throttle opening.
5. Remain alert and be prepared to take emergency action. This may include quick dismounting of the ATV.

⚠ WARNING

Braking and handling are greatly affected whenever operating in hilly terrain.

Loss of vehicle control or overturning of the ATV could occur.

- Avoid operating on steep hills (25° maximum).
- Use extreme care when operating your ATV in hilly terrain.

⚠ WARNING indicates a potential hazard which could result in serious injury or death.

Sidehilling

Sidehilling your ATV is one of the most dangerous types of riding and should be avoided if possible. In the event you do enter into a situation where sidehilling is necessary, always:

1. Slow down.
2. Lean into the hill transferring your upper body weight toward the hill while keeping your feet on the footrests.
3. Steer slightly into the hill to maintain vehicle directions.

If vehicle begins to tip, quickly turn the front wheel downhill, if possible, or dismount on the uphill side **immediately!**

⚠ WARNING

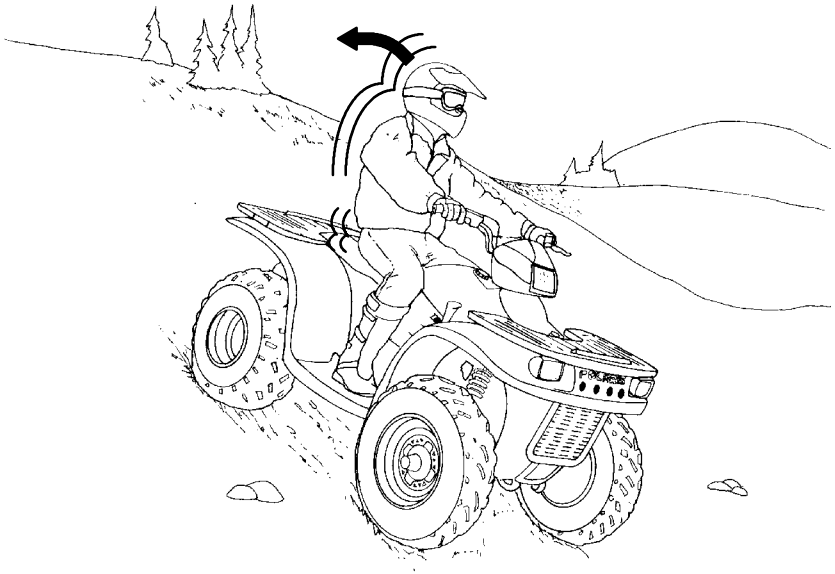
Improperly crossing hills or turning on hills can be dangerous!

Loss of vehicle control or overturning of the ATV could occur.

- Avoid crossing the side of a steep hill if possible.
- Use extreme care when operating your ATV in hilly terrain.

RIDING

Traveling Downhill



Whenever descending a hill, always:

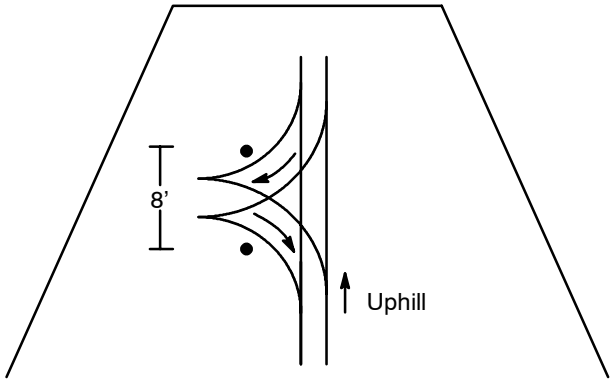
1. Drive directly downhill.
2. Transfer your weight to the rear of the vehicle.
3. Slow down.
4. Apply the brakes slightly to aid in slowing.

Familiarize yourself with the auxiliary rear brake pedal and its use in the event loss of normal service brakes occurs.

⚠ WARNING

Loss of vehicle control due to excessive speed can occur. Loss of control may result in serious injury or death.

Turning Around On A Hill



If the ATV stalls while climbing a hill, never back it down the hill! One maneuver which can be used when it is necessary to turn around while climbing a hill is the K-turn.

1. Stop and lock the parking brake while maintaining body weight uphill.
2. Leave transmission in forward and shut off engine.
3. Dismount on left or uphill side of ATV.
4. Staying uphill of ATV, turn handlebars full left (while facing front of ATV).
5. While holding service brake, release parking brake lock and slowly allow ATV to roll around to your right until ATV is pointing across the hill or slightly downward.
6. Lock the parking brake and remount ATV from the uphill side, maintaining body weight uphill.
7. Restart engine with transmission still in forward, release parking brake, and proceed slowly, controlling speed with the service brake, until ATV is on reasonably level ground.

⚠ WARNING

Avoid climbing steep hills.

Loss of vehicle control or overturning of the ATV could occur.

- Use extreme care when operating your ATV in hilly terrain.

RIDING

Crossing Streams

Your Polaris ATV can operate through water up to depths reaching the footrests. Before fording streams always:

1. Determine water depths and current.
2. Choose a crossing where both banks have gradual inclines.
3. Proceed slowly, avoiding rocks and obstacles if possible.
4. After crossing, dry the brakes by applying light pressure to the lever until braking action is normal.

CAUTION: Should your ATV become immersed, it will be necessary to take it to your dealer as soon as possible. **Do not start the engine!** Immersion of the ATV can cause major damage if not correctly repaired.

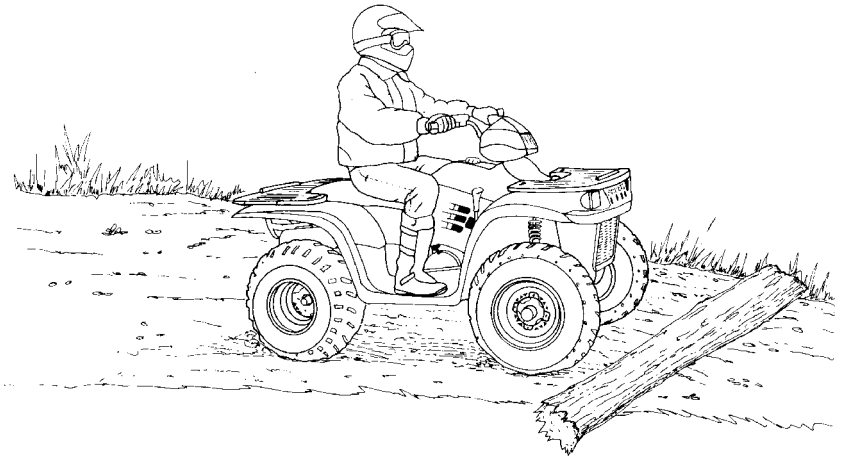
⚠ WARNING

Never try to cross any deep or fast flowing streams.

The large tires can cause the ATV to float resulting in loss of control.

- Determine stream depth and speed before crossing.

Trail Obstacles



Keep Alert!

Look ahead and learn to read the trail as you ride. Stay on the right side of the trail, if possible, and be constantly alert for hazards such as logs, rocks and low hanging branches.

⚠ WARNING

Hidden or unseen hazards on the trail can be dangerous.

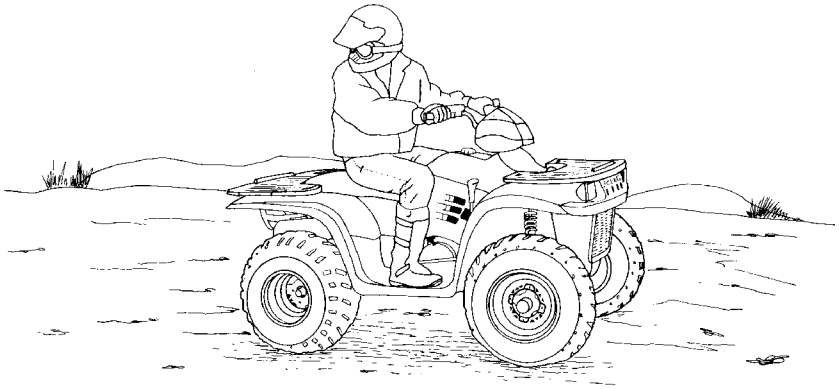
Personal injury or the vehicle overturning can occur from unseen obstacles.

- Keep alert and constantly look for obstacles on the trail.

⚠ WARNING indicates a potential hazard which could result in serious injury or death.

RIDING

Backing Up



Backing Up

1. Whenever backing up, always avoid backing downhill.
2. Back slowly.
3. When in reverse, apply the brakes lightly for stopping.
4. Avoid turning at sharp angles in reverse.
5. Never open the throttle suddenly while backing.
6. Never activate override button while throttle is open. Loss of control may result.

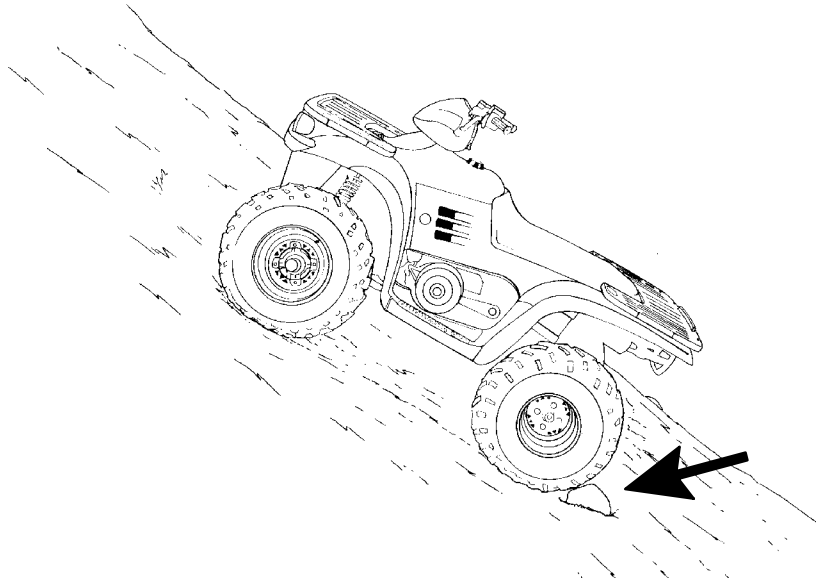
NOTE: This vehicle is equipped with a reverse speed limiter. The override button should be used with caution as rearward vehicle speed is greatly increased. Do not operate at wide open throttle. Only open the throttle enough to maintain a desired speed. Opening the throttle more than required may cause excessive fuel to build in the exhaust, resulting in engine popping and/or engine damage.

⚠ WARNING

Backing your ATV can be dangerous! You could hit an obstacle or person behind you; or the ATV could tip over rearward on a steep incline.

- Always back slowly, avoiding excessive speed; and do not use the reverse speed override switch system unless additional power is required for vehicle movement.
- Avoid backing on steep inclines.

Parking on an Incline



Whenever the Vehicle is Parked

1. Turn the engine off.
2. Place the transmission in gear.
3. Set the parking brake.
4. Avoid parking on an incline. If it is necessary to park on an incline, always block the rear wheels on the down hill side as shown above.
5. Shut off fuel supply.

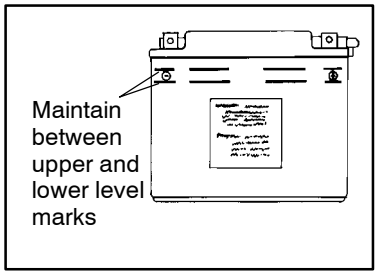
⚠WARNING indicates a potential hazard which could result in serious injury or death.

BATTERY

Battery

CAUTION

Whenever removing the battery, disconnect the negative (black) cable first. When reinstalling the battery, connect the negative (black) cable last.



Replenishing the Battery Fluid

A poorly maintained battery will deteriorate rapidly. Check the battery fluid level often. The fluid level should be kept between the upper and lower level marks.

To refill use only distilled water. Tap water contains minerals which are harmful to a battery.

Battery Connections

Battery terminals and connections should be kept free of corrosion.

If cleaning is necessary, remove the corrosion with a stiff wire brush. Wash with a solution of one tablespoon baking soda and one cup water. Rinse well with tap water and dry off with clean rags. Coat the terminals with dielectric grease or petroleum jelly.

Do not allow cleaning solution or tap water to enter the battery. It will shorten the life of the battery.

Vehicle lamps will burn out if battery is disconnected during vehicle operation. Also, the reverse speed limiter can be damaged.

⚠ WARNING

Battery electrolyte is poisonous. It contains sulfuric acid. Serious burns can result from contact with skin, eyes or clothing. Antidote:

External: Flush with water.

Internal: Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg, or vegetable oil. Call physician immediately.

Eyes: Flush with water for 15 minutes and get prompt medical attention.

Batteries produce explosive gases. Keep sparks, flame, cigarettes, etc. away. Ventilate when charging or using in an enclosed space. Always shield eyes when working near batteries. KEEP OUT OF REACH OF CHILDREN.

Battery Removal

1. Disconnect hold down straps holding the electrical box and battery in position and remove battery cover.
2. Remove the battery vent tube from the battery.
3. Disconnect the black (negative) battery cable first.
4. Disconnect the red (positive) battery cable next.
5. Lift the battery out of the ATV, being careful not to tip it sideways and spill any electrolyte.

CAUTION: If electrolyte spills, immediately wash it off with a solution of one tablespoon baking soda and one cup water to prevent damage to the ATV.

Battery Installation

WARNING: To avoid the possibility of explosion, always connect battery cables in the order specified. Red (positive) cable first; black (negative) cable last.

1. Set the battery in its holder.
2. Install the battery vent tube. It must be free from obstructions and securely installed. If not, battery gases could accumulate and cause an explosion. The tube should be routed away from the frame and body to prevent corrosion. Avoid skin contact with electrolyte, severe burns could result.
3. First connect and tighten the red (positive) cable.
4. Second connect and tighten the black (negative) cable.
5. Reinstall battery cover and attach the hold down strap.
6. Verify that cables are properly routed.

NOTE:

- When your ATV is placed in storage for three months or more, the battery should be removed, charged to proper level, and stored in a cool dry place.
- Before reusing, take the battery to your dealer for testing and recharging.
- Power plug leads may need to be bent down so that the battery cover may be installed.

NOISE EMISSION CONTROL SYSTEM REGULATION

TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED!

U.S. Federal law prohibits the following acts or the causing thereof:

(1) The removal or rendering inoperative by any person other than for purposes of maintenance, repair, or replacement of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use or

(2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

“AMONG THOSE ACTS PRESUMED TO CONSTITUTE TAMPERING ARE THE ACTS LISTED BELOW.”

1. Removal or alteration or the puncturing of the muffler or any engine component which conducts removal of engine exhaust gases.
2. Removal or alteration or the puncturing of any part of the engine air induction system.
3. Replacement of any vehicle parts with parts not in compliance with federal regulations.
4. Lack of proper maintenance.

CAUTION: Remember, exhaust system components are very hot during and after use of ATV.

- Do not touch exhaust system components. Serious burns can result.
- Be especially careful when traveling through tall grass. The potential for fire exists.

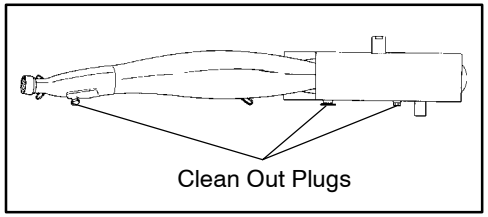
USFS Approved Spark Arrestor

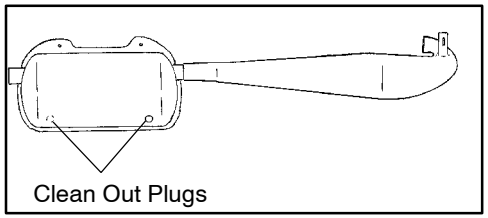
Polaris ATVs have mufflers that were tested and approved in accordance with the USFS Forest Service Standard 5100-1A. For specific information on your model, see the Owner’s Manual Specification Supplement that came with your machine.

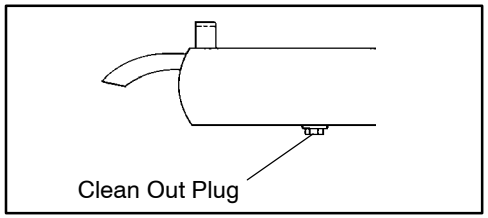
Spark Arrestor

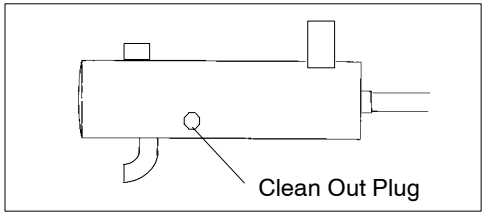
The exhaust pipe must be periodically purged of accumulated carbon as follows:

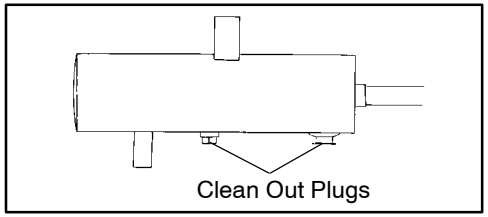
1. Remove the clean out plugs located on the bottom of the muffler as shown above.
2. Place the transmission in neutral and start the engine. Purge accumulated carbon from the system by momentarily revving the engine several times.
3. If some carbon is expelled, cover the exhaust outlet and rap on the pipe around the clean out plugs while revving the engine several more times.
4. If particles are still suspected to be in the muffler, back the machine onto an incline so the rear of the machine is one foot higher than the front. Set the parking brake and block the wheels. Make sure the machine is in neutral and repeat steps 2 and 3. **WARNING:** SEE BELOW.
5. If particles are still suspected to be in the muffler, drive the machine onto the incline so the front of the machine is one foot higher than the rear. Set the parking brake and block the wheels. Make sure the machine is in neutral and repeat steps 2 and 3. **WARNING:** SEE BELOW.
6. Repeat steps 2 through 5 until no more particles are expelled when the engine is revved.
7. Stop the engine and allow the arrestor to cool.
8. Reinstall the arrestor plugs.











MAINTENANCE

Spark Arrestor (Cont.)

⚠ WARNING

- Do not perform this operation immediately after the engine has been run because the exhaust system becomes very hot.
- Because of the increased fire hazard, make sure that there are no combustible materials in the area when purging the spark arrestor.
- Wear eye protection.
- Do not stand behind or in front of the vehicle while purging the carbon from the spark arrestor.
- Never run the engine in an enclosed area. The exhaust contains poisonous carbon monoxide gas.
- Do not go under the machine while it is inclined.

Failure to heed these warnings could result in serious personal injury or death.

CAUTION: Keep combustible materials away from exhaust system. Fire may result.

Tool Kits

To help you perform routine maintenance, a tool kit is provided in the storage compartment under the seat. Items included in the kits are:

2 cycle engines

- flat screwdriver
- spark plug wrench with Phillips head screwdriver
- wrench
- tire pressure gauge
- spanner wrench for adjusting rear shock spring preload (selected models)

4 cycle engines

- screwdriver
- open end wrench (8-10 mm)
- open end wrench (12-14 mm)
- box end wrench
- tire pressure gauge
- spark plug wrench and handle
- spanner wrench for adjusting rear shock spring preload (selected models)

NOTE: Other tools are also necessary to perform maintenance work. They are called out later in this manual.

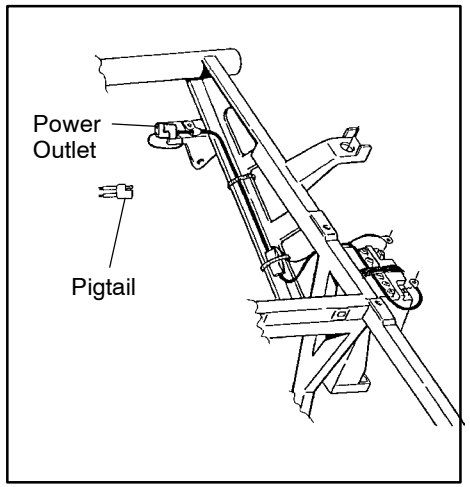
Power Pig Tail

Some models are equipped with an auxiliary power outlet. Refer to your Owner's Manual Supplement to determine if your machine has one.

A power pig tail is included in the tool kit . This pig tail will allow you to plug power accessories into the vehicle. Attach the pig tail to the power accessory and then plug into the rear power outlet of the vehicle.

CAUTION: Be sure to wrap bare wires with electrical tape and follow correct wire splicing procedures to avoid shorts in the wiring system.

Additional pig tails may be purchased under Polaris PN 2460442.



MAINTENANCE

Periodic Maintenance Schedule

Careful periodic maintenance will help keep your vehicle in the safest, most reliable condition. Inspection, adjustment and lubrication intervals of important components are explained in the following chart

Maintenance intervals are based upon average riding conditions and a vehicle speed of approximately 10 miles per hour. Vehicles subjected to severe use, such as operation in wet or dusty areas, should be inspected and serviced more frequently. If you are not familiar with safe service and adjustment procedures, have a qualified dealer perform these operations.

Inspect, clean, lubricate, adjust or replace parts as necessary. **NOTE**: Inspection may reveal the need for replacement parts. Always use genuine Polaris parts available from your Polaris dealer.

Service and adjustments are critical. If you are not familiar with safe service and adjustment procedures, have a qualified dealer perform these operations.

■ **CAUTION:** Due to the nature of these adjustments, it is recommended that service be performed by an authorized Polaris dealer. Do not attempt to perform this work unless you are familiar with mechanical repair.

▶ More often under severe use, such as dirty or wet conditions

★ Emission Control System Service (California - 4-Cycle)

	Item	Hours or Odometer	Frequency	Remarks
▶★	Engine Oil - Level/Change (4-Cycle)	100 hrs/1000 miles	6 months	Check Level Daily; Break in Service at 1 month. Change oil more often in cold weather use.
▶★	Oil Filter(4-Cycle)	100 hrs/1000 miles	6 months	Replace with oil change
	Injector Oil Level (2-Cycle)	Daily	Daily	Check when refueling
■	Injector Oil Filter (2-Cycle)	100 hrs	Annually	Replace
	Engine Counterbalance (400 Engines)	20 hrs	Monthly	Check oil level; change annually
	Oil Pump Cable (2-Cycle)	50 hrs	6 months	Inspect, adjust, lubricate, replace if required
▶★	Engine breather filter (4 cycle)	20 hrs	Monthly	Inspect-replace annually and as needed
★	Engine breather hose (4 cycle)	100 hrs	6 months	Inspect
	Engine Mounts	100 hrs	12 months	Inspect
	Engine Cylinder Head and Cylinder Base Fasteners	25 hrs	3 months	Inspect (re-torque required at first service only)
▶★	Air Filter - Pre-Cleaner	Daily	Daily	Inspect-Clean
▶★	Air Filter - Main Element	Weekly	Weekly	Inspect-Replace if necessary
▶	Air Box Sediment Tube	Daily	Daily	Drain deposits whenever visible
■★	Valve Clearance (4-Cycle)	100 hrs	12 months	Inspect/Adjust
★	Spark Plug	100 hrs	12 months	Inspect-replace if necessary
■★	Ignition Timing	100 hrs	12 months	Inspect and adjust as needed

Periodic Maintenance Schedule (Cont.)

	Item	Hours or Odometer	Frequency	Remarks
■★	Fuel System	100 hours	12 months	Check for leaks at tank cap, lines, fuel valve, filter, pump and carburetor. Replace lines every two years.
■	Fuel Filter	100 hrs	12 months	Replace annually
	Carburetor Float Bowl	50 hrs	6 months	Drain bowl periodically and prior to storage
★	Idle Speed	As Required	As Required	Adjust
■	Throttle Cable/ETC Switch	50 hrs	6 months	Inspect-adjust, lubricate, replace if necessary; pre-ride inspection item
★	Choke (Enricher) Cable	50 hrs	6 months	Inspect-adjust, lubricate, replace if necessary
	Coolant/Level Inspection	Daily	Daily	Replace engine coolant every two years
	Coolant strength/pressure test system	100 hrs	6 months	Inspect strength seasonally; pressure test system annually
	Radiator	100 hrs	12 months	Inspect/clean external surface
	Cooling System hoses	100 hrs	12 months	Inspect
	Spark arrestor	100 hrs	12 months	Clean out
	Recoil housing	As required	As required	Drain moisture out after riding in water
▶	General Lubrication	50 hrs	3 months	Lubricate all fittings, pivots, cables, etc.
▶	Front hubs/fluid check (AWD)	50 hrs	6 months	Check monthly
▶	Front hubs/fluid change (AWD)	100 hrs	12 months	
▶	Front Gearcase OIl (shaft drive)	100 hrs	12 months	Check monthly and change annually
▶	Transmission Oil Level	25 hrs	Monthly	Inspect monthly; change annually
	Shift linkage	50 hrs	6 months	Inspect, lubricate, adjust
■	Shift selector box	200 hrs	24 months	Change lubricant every two years
■	Drive belt	50 hrs	6 months	Inspect-adjust, replace if necessary
■	Clutches (drive and driven)	100 hrs	12 months	Inspect, clean
■	Steering	50 hrs	6 months	Inspect daily, lubricate
■	Toe adjustment	As required	As required	Periodic inspection, adjust when parts are replaced
▶	Rear Axle	50 hrs	6 months	Inspect bearings
▶	Front Suspension	50 hrs	6 months	Inspect-lubricate, tighten fasteners
▶	Rear Suspension	50 hrs	6 months	Inspect, tighten fasteners
■	Front wheel bearings	300 hrs	36 months	Replace
▶	Drive Chain(s)	50 hrs	6 months	Inspect daily, adjust and lubricate if needed
	Battery	20 hrs	monthly	Check Terminals/clean/check fluid level
	Headlight Aim	As required	As required	Adjust if necessary

MAINTENANCE

Periodic Maintenance Schedule (Cont.)

	Item	Hours or Odometer	Frequency	Remarks
	Headlamp Inspection	Daily	Daily	Check operation daily; apply Polaris dielectric grease to connector when replaced
	Tail lamp inspection	Daily	Daily	Check operation daily; apply Polaris dielectric grease to socket when replaced
	Brake System	Pre-ride	Pre-ride	Pre-ride inspection item
■	Brake fluid	200 hrs	24 months	Change every two years
■	Brake pad wear	10 hrs/100 miles	Monthly	Inspect periodically
	Auxiliary	As required	As required	Inspect deflection daily; adjust
	Tires	Pre-ride	Pre-ride	Inspect daily, pre-ride inspection item
	Wheels	Pre-ride	Pre-ride	Pre-ride inspection item
	Frame nuts, bolts, fasteners	Pre-ride	Pre-ride	Pre-ride inspection item

■ **CAUTION:** Due to the nature of these adjustments, it is recommended that service be performed by an authorized Polaris dealer. Do not attempt to perform this work unless you are familiar with mechanical repair.

▶ More often under severe use, such as dirty or wet conditions

★ Emission Control System Service (California - 4-Cycle)

Lubrication Recommendations

Item	Lube Rec.	Method	Frequency*
1. Engine Oil (2-Cycle)	Polaris Injection Oil	Fill oil tank. See page 48.	As needed, when refueling
2.Engine OIl (4-Cycle)	Polaris Premium 4 Synthetic 0W40	Add to proper level on dipstick. See page 50.	Check level daily.
3. Brake Fluid	DOT 3 Only	Maintain level between fill lines. See page 39.	As required; change every two years or 200 hours
4. Transmission Oil	Polaris Premium Synthetic chain case lube	Add to FULL level on dipstick. See page 115.	Change annually or at 100 hours
5. Front Gearcase Oil	GL5 80-90 Weight Gear Lube	Fill to bottom thread of filler hole. Make certain machine is on level surface.	Change annually
6. Rear Halfshafts	Grease+	Locate Fittings and Grease	Every 3 months or 50 hours
7. Front Prop Shaft U-joints	Grease+	Locate Fittings and Grease	Every 3 months or 50 hours
8. Front Propshaft Yoke	Grease+	Locate fittings and grease – 3 pumps maximum	Every 3 months or 50 hours
9. Speedometer Cable	Polaris Cable Lube	Disconnect cable on back of speedometer and lubricate inner cable.	3 months or 50 hours
10. Drive Chain(s)	O-Ring chain lube or SAE 80/90	Lubricate as often as required. Before each ride in wet conditions	As required
11. Demand 4 Hubs - All Wheel Drive ATVs	Premium Hub Lube	Remove set screw in hubs. Rotate wheels to 4 O'clock position. If lubricant is not visible add more. Reinstall set screw.	Annually or at 100 hrs
12. Front Drive Axle (U Joint) (AWD Models)	Grease+	Locate grease fitting and grease with grease gun.	Every 3 months or 50 hours
13. Ball Joint	Grease**	Locate fitting on back side of struts and grease with grease gun.	Every 3 months or 50 hours

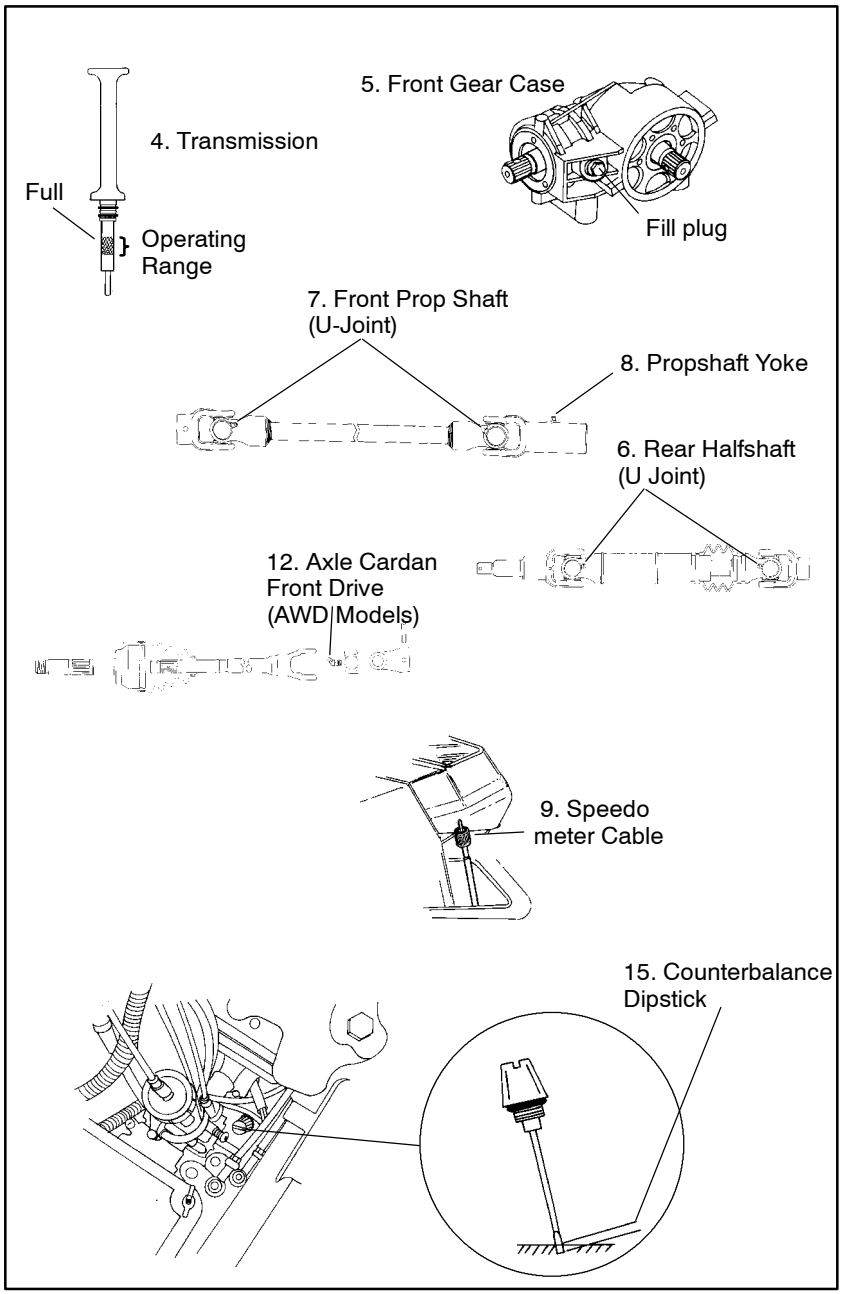
MAINTENANCE

Lubrication Recommendations

14. Front A Arm Pivot Shaft	Grease**Δ	Locate fitting on pivot shaft and grease with grease gun.	Every 3 months or 50 hours
15. Counter Balance Housing (400)	SAE 10/30	Check level on dipstick and add oil as necessary. Change annually. To change oil see page 117.	Check monthly and change annually
16. Output Shaft Support Bearing	Grease **	Locate fitting on bearing and grease with a grease gun.	Monthly or at 20 hours
17. Steering Post Bushings	Grease**	Locate fittings on steering post and grease with grease gun.	Every 3 months or 50 hours
18. Rear Axle Bearing	Grease**	Locate fittings and grease	Every 3 months or 50 hours
19. Swing Arm Bushings	Grease**	Locate fittings on swing arm and grease with grease gun.	Monthly or at 20 hours
20. Chain Adjusters (Center and Front Eccentrics)	Grease**	Locate fitting on center eccentric and grease. Locate fitting on front eccentric (side opposite chain) and grease.	Every 3 months or 50 hours
21. Upper Control Arms	Grease**Δ	Locate fittings and grease	Semi-annually
22. Lower Control Arms	Grease**Δ	Locate fittings and grease	Semi-annually
23. Rear Wheel Hub Bearing Carrier	Grease**Δ	Locate fitting and grease	Semi-annually
24. Rear Anti-Roll Bar	Grease		Semi-annually
25. Tie Rod Ends	Grease**	Remove bolt above inner tie rod boot. Lift boot. Clean away dirt and grease. Apply fresh grease by hand and reassemble. On models equipped with grease fitting, locate outer tie rod fitting and grease with grease gun.	Every 3 months or 50 hours

* More often under severe use, such as wet or dusty conditions.
**Polaris Premium all Season Grease or grease conforming to NLGI No. 2, such as Conoco Superlube M or Mobilegrease Special.
+ Grease every 500 miles, or after submerging in water or before long periods of storage or after pressure washing. Always use Polaris Premium U-Joint Lube for maximum service of these driveline components (PN 2871515 3 oz.)(PN 2871551 14 oz.).
Δ When suspension action becomes stiff or after washing.
NOTE: Hours are based on 10 mph average.

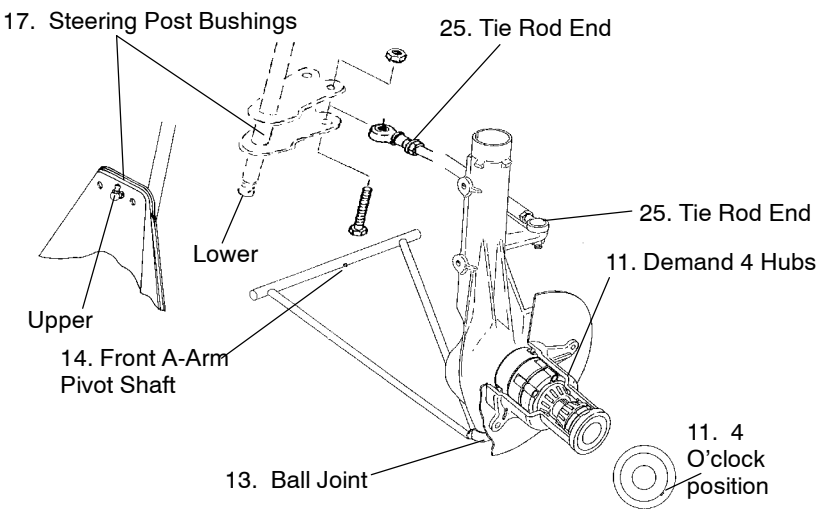
Lubrication Recommendations



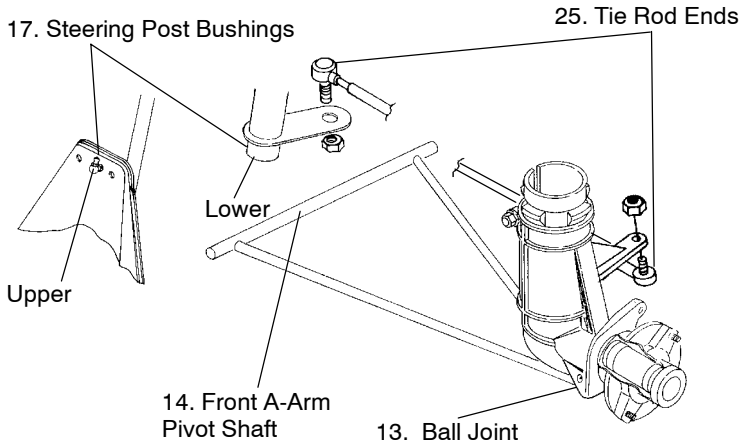
MAINTENANCE

Lubrication Recommendations

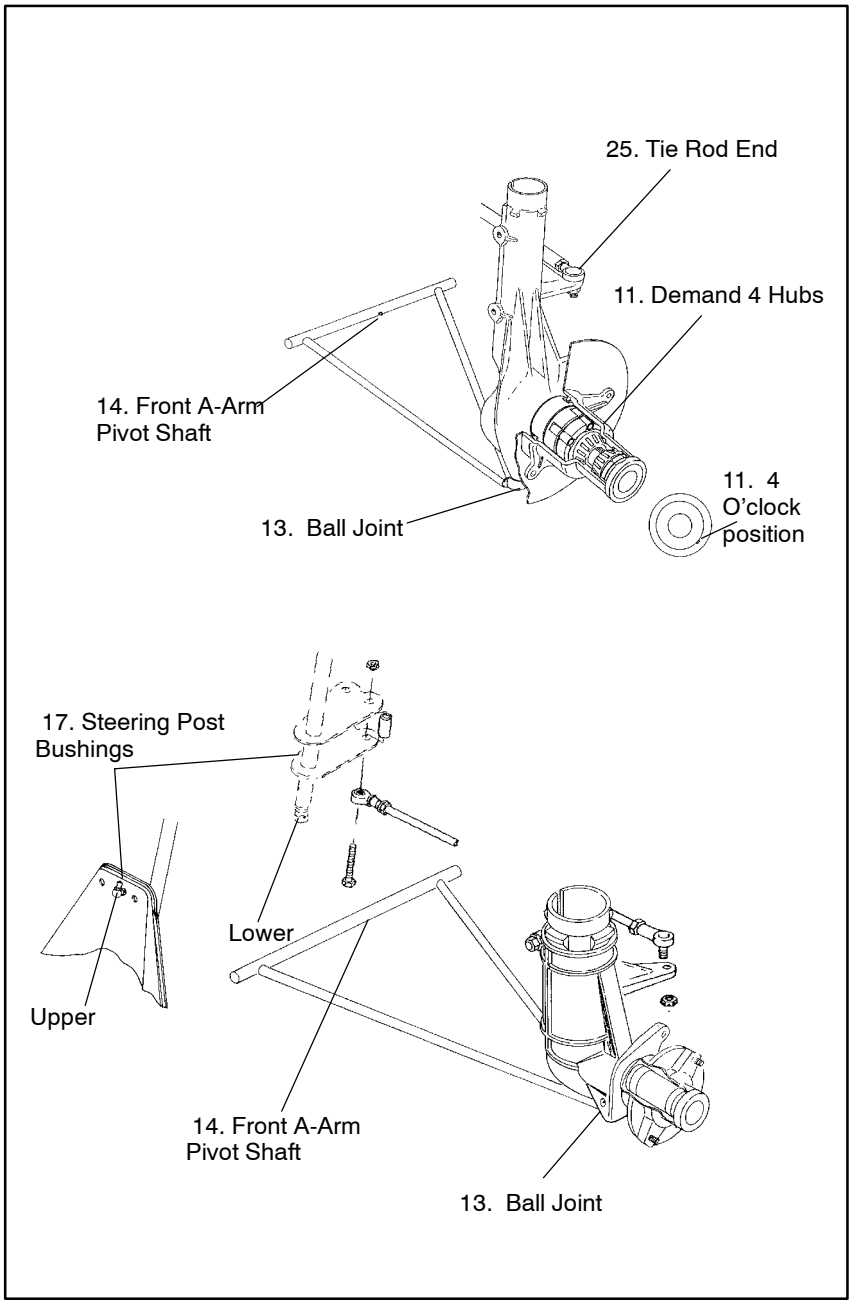
4WD



Trail Boss

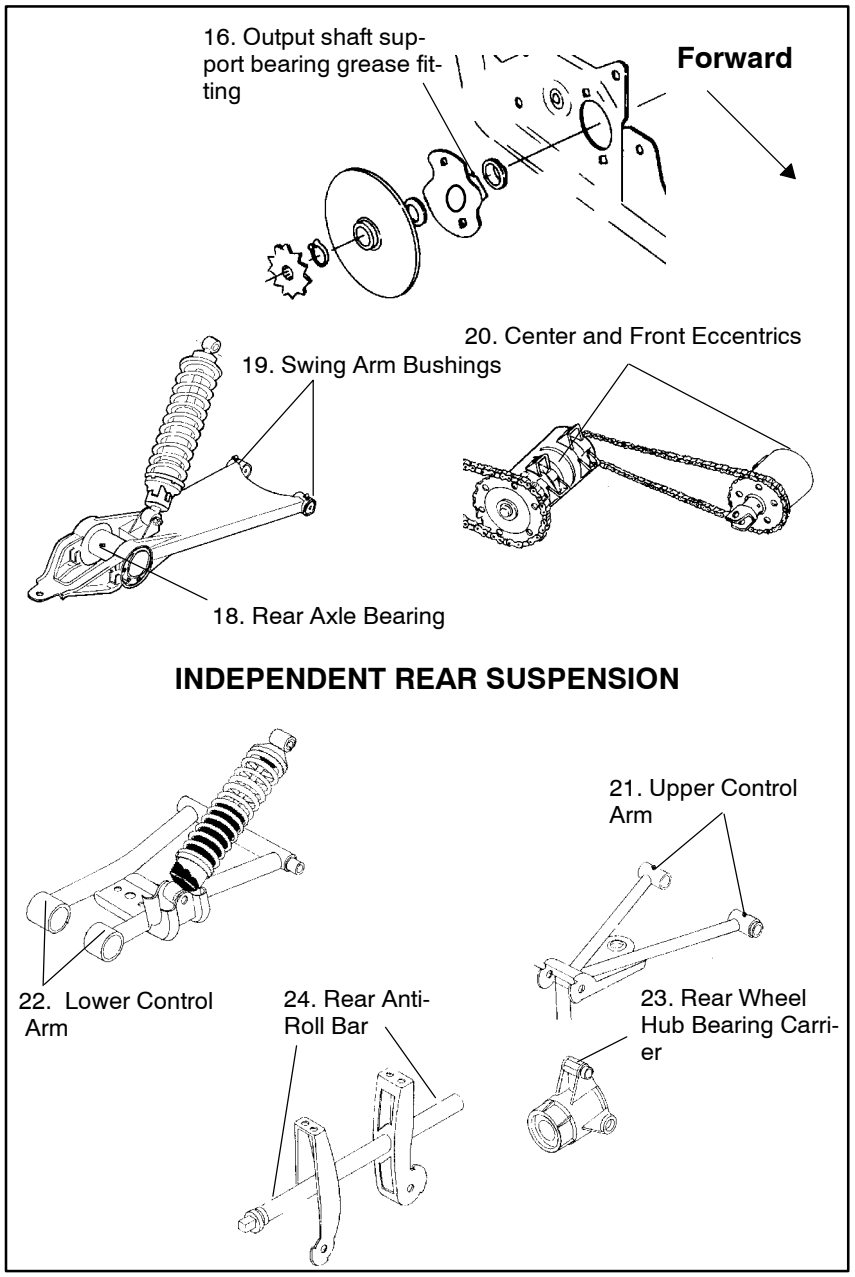


Lubrication Recommendations



MAINTENANCE

Lubrication Recommendations


16. Output shaft support bearing grease fitting
Forward
20. Center and Front Eccentrics
19. Swing Arm Bushings
18. Rear Axle Bearing
INDEPENDENT REAR SUSPENSION
21. Upper Control Arm
22. Lower Control Arm
24. Rear Anti-Roll Bar
23. Rear Wheel Hub Bearing Carrier

Periodic Maintenance Record

Use the following chart to record periodic maintenance work:

Maintenance Interval Performed	Servicing Date	Servicing Dealer or Person	Remarks
First 5 Hrs.			
25 Hrs.			
50 Hrs.			
75 Hrs.			
100 Hrs.			

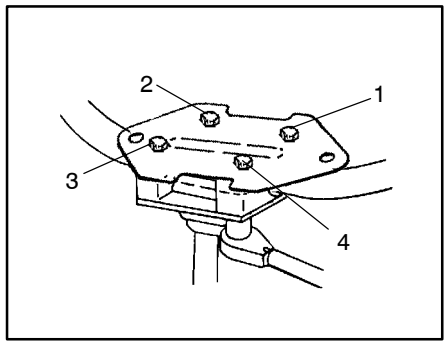
MAINTENANCE

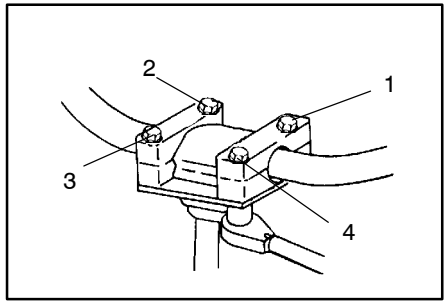
Steering

Handlebar Adjustment

Your ATV has handlebars which can be adjusted for your personal fit.

1. Locate handlebar bolts. On models with a headlight pod, it will be necessary to remove the upper headlight pod. On other models remove the handlebar cover.
2. Loosen the four bolts.
3. Adjust handlebar to desired height. Be sure handlebars do not hit gas tank or any other part of machine when turned fully to left or right.
4. Torque handlebar adjuster block bolts to 10 to 12 ft. lbs.





NOTE: Tighten bolts so there is an equal gap at the front and rear of the handlebar block. Improper gap will result in improper fit of upper pod.

⚠ WARNING

Improper adjustment of the handlebars or incorrect torquing of the adjuster block tightening bolts can cause limited steering or loosening of the handlebars, resulting in loss of control and possible serious personal injury or death.

The following items should be checked occasionally for tightness; or if they have been loosened for maintenance service.

Axle and Wheel Nut Torque Specifications

Model	Item	Specification
2 X 4	Front Spindle Nut(s)	40 Ft. Lbs.
	Front Wheel Nuts	15 Ft. Lbs.
	Rear Axle Nut(s)	80 Ft. Lbs.
	Rear Wheel Nuts	50 Ft. Lbs.
4x4 Chain Drive	Front Spindle Nut(s)	Dealer Performed Service
	Front Wheel Nuts	15 Ft. Lbs.
	Rear Axle Nut(s)	80 Ft. Lbs.
	Rear Wheel Nuts	50 Ft. Lbs.
4 x 4 Shaft Drive	Front Spindle Nut(s)	Dealer Performed Service
	Front Wheel Nuts	15 Ft. Lbs.
	Rear Hub Retaining Nut(s)	100 Ft. Lbs.
	Rear Wheel Nuts	15 Ft. Lbs.

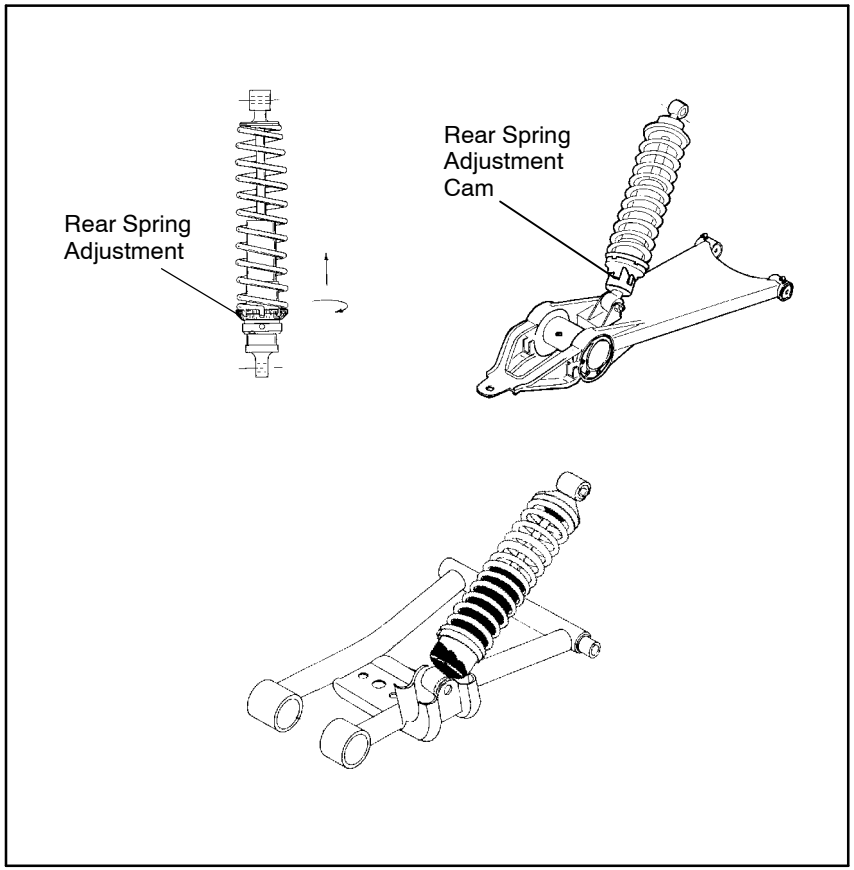
Front Wheel Hub Tightening

Front wheel bearing tightness and spindle nut retention are critical component operations. Service work must be performed by your authorized Polaris dealer.

MAINTENANCE

Rear Spring Adjustment

The rear shock absorber spring is adjusted by rotating the adjuster in the direction required to increase or decrease spring tension.



Optional Suspension Springs

Although your Polaris ATV suspension has the capability of providing you with the best ride possible, the following accessory springs are available to better suit your individual riding preference.

NOTE: Optional springs may be a different color than standard springs. Owner may paint springs to desired color using Polaris touch up paint, available through your dealer.

	SOFT ←		→ FIRM
Trail Boss Rear Compression Spring	7041518-067 OPTION 175 LB/IN	7041204-179 STANDARD 190 lb/in	7041303-067 OPTION 250 lb/in
Trail Boss - Front Strut Spring	7041471-067 OPTION 41 LB/IN	7041238-179 STANDARD 61 lb/in	7041375-067 OPTION 64/113 lb/in
Sportsman 500 4x4 - Rear Compression Spring	7041517-067 OPTION 80 lb/in	7041546-067 STANDARD 100 lb/in	7041519-067 OPTION 140 lb/in
Sportsman 500 4x4 - Front Strut Spring	7041238-067 OPTION 61 lb/in	7041375-067 STANDARD 64/113 lb/in	7041450-067 OPTION 101 lb/in
Xplorer 300- Rear Compression Spring	7041518-067 OPTION 175 lb/in	7041204-195 STANDARD 190 lb/in	7041303-067 OPTION 250 lb/in
Xplorer 300 - Front Strut Spring	7041238-067 OPTION 61 lb/in	7041375-195 STANDARD 64/113 lb/in	7041450-067 OPTION 101 lb/in
Xplorer 400L - Rear Compression Spring	7041518-067 OPTION 175 lb/in	7041204-195 STANDARD 190 lb/in	7041303-067 OPTION 250 lb/in
Xplorer 400L - Front Strut Spring	7041238-067 OPTION 61 lb/in	7041375-195 STANDARD 64/113 lb/in	7041450-067 OPTION 101 lb/in
Magnum 2x4 - Front Strut Spring	7041238-067 OPTION 61 lb/in	7041375-093 STANDARD 64/113 lb/in	7041450-067 OPTION 101 lb/in
Magnum 2x4 – Rear Compression spring	7041518-067 OPTION 175 lb/in	7041204-093 STANDARD 190 lb/in	7041303-067 OPTION 250 lb/in

MAINTENANCE

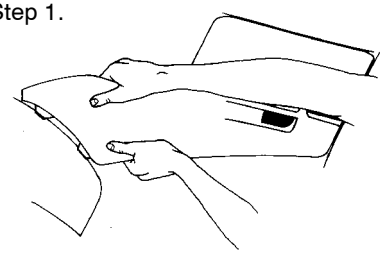
	SOFT ←		→ FIRM
Xpress 300- Rear Compression Spring	7041518-067 OPTION 175 lb/in	7041204-157 STANDARD 190 lb/in	7041303-067 OPTION 250 lb/in
Xpress 300 - Front Strut Spring	7041238-067 OPTION 61 lb/in	7041375-157 STANDARD 64/113 lb/in	7041450-067 OPTION 101 lb/in
Magnum 4x4 -- Front Strut Spring	7041238-067 OPTION 61 lb/in	7041375-195 STANDARD 64/113 lb/in	7041415-067 OPTION 101 lb/in
Magnum 4x4 - Rear Compression Spring	7041518-067 OPTION 175 lb/in	7041204-195 STANDARD 190 lb/in	7041303-067 OPTION 250 lb/in
Sport 400L- Rear Compression Spring	7041470-067 OPTION 150 lb/in	7041389-194 STANDARD 175 lb/in	7041204-067 OPTION 190 lb/in
Sport 400L - Front Strut Spring	7041471-067 OPTION 41 lb/in	7041238-194 STANDARD 61 lb/in	7041375-067 OPTION 64/113 lb/in
Trail Blazer- Rear Compression Spring	N/A	7041470-093 STANDARD 150 lb/in	7041389-067 OPTION 175 lb/in
Trail Blazer - Front Strut Spring	N/A	7041471-093 STANDARD 41 lb/in	7041238-067 OPTION 61 lb/in
Scrambler 400L- Rear Comp. Spring	7041470-067 OPTION 175 lb/in	7041389-171 STANDARD 175 lb/in	7041303-067 OPTION 250 lb/in
Scrambler 400L - Front Strut Spring	7041648-067 OPTION 75/100 lb/in	7041603-171 STANDARD 75/110 lb/in	7041647-067 OPTION 80/120 lb/in
Scrambler 500- Rear Comp. Spring	7041518-067 OPTION 175 lb/in	7041389-216 STANDARD 175 lb/in	7041303-067 OPTION 250 lb/in
Scrambler 500 - Front Strut Spring	7041648-067 OPTION 75/100 lb/in	7041603-216 STANDARD 75/110 lb/in	7041647-067 OPTION 80/120 lb/in
Xplorer 500 4x4 - Rear Compression Spring	7041238-067 OPTION 61 lb/in	7041375-067 STANDARD 64/113 lb/in	7041450-067 OPTION 101 lb/in
Xplorer 500 4x4 - Front Strut Spring	N/A	7041546-067 STANDARD 100 lb/in	7041519-067 OPTION 140 lb/in

Side Panel Removal (Gen IV Models)

Side panel removal may be difficult until the locking tabs and receivers have been snapped and unsnapped a few times.

1. Remove seat. Grasp rear of side panel near rear cab. With a quick and firm motion, pull the panel forward and outward to disengage the two rear tabs.

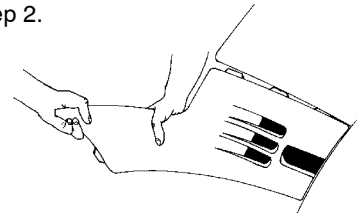
Step 1.



Pull forward and out to disengage two rear tabs.

2. Place hand on top of side panel behind the fuel tank. With a quick and firm motion, push down on the side panel to disengage the top rear two tabs. Then pull up on side panel to disengage front upper and lower tab.

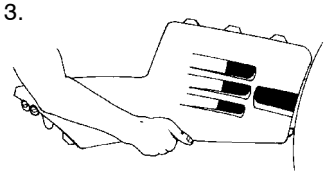
Step 2.



Push down to disengage top rear two tabs.

3. To reinstall side panel, align panel tabs with slots on front cab. Push panel upward and forward until tabs lock. Bend rear of side panel and insert the two tabs into the rear cab.

Step 3.



To reinstall, align panel tabs with slots. Push upward and forward until tabs lock.

MAINTENANCE

Air Cleaner
Trail Boss, Xpress 300, Xplorer 300, Xplorer 400

Dual Stage Air Cleaner

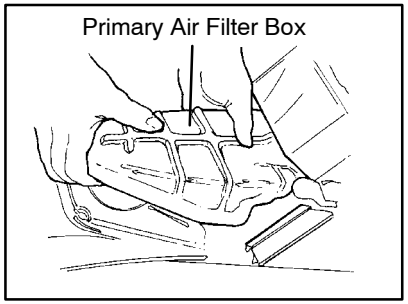
The Polaris ATV is equipped with a dual stage engine air filtration system. The primary pre-cleaner foam boot is designed to remove the majority of dust particles before they reach the secondary dry filter element.

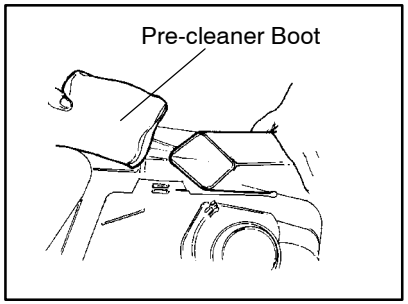
Primary Pre-cleaner Foam Boot

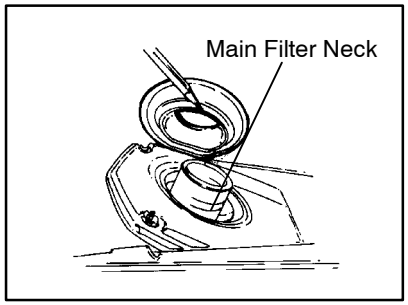
Inspect the primary air cleaner boot daily or on a regular basis depending on running conditions and dust.

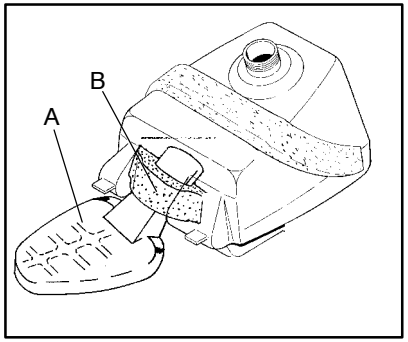
1. Remove the ATV seat.
2. Remove the primary air filter box.
3. Remove the yellow pre-cleaner foam boot, held in place by a gray collar, from the air box. Do not remove the collar.
4. Carefully wash the yellow foam boot in soapy water and dry it.
5. Oil the foam boot with engine injection oil (1 to 2 teaspoons). Squeeze out the excess into an absorbant cloth.
6. Reinstall the yellow foam boot onto the air filter box.
7. Reinstall the primary air filter box removed in step 2. **NOTE:** There will be some resistance. Be sure the black rubber sealing ring is securely positioned over the main filter neck.

CAUTION: When installing the primary air filter box be sure the gray foam collar (B) is below the intake opening of the air box intake (A). Improper installation will restrict airflow to the engine possibly resulting in engine damage.









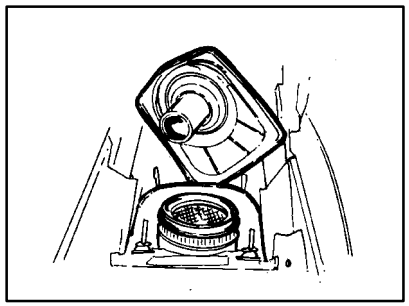
Air Cleaner
Trail Blazer, Trail Boss, Xpress 300, Xplorer 300, Xplorer 400

Secondary (Main) Filter

Inspect the secondary filter weekly or after every 50 hours of operation.

CAUTION: Never operate the ATV with the filter element removed. Dirt will enter the engine causing serious rapid wear and damage to the engine.

Secondary filter removal and installation procedure:



1. Remove ATV seat.
2. Remove primary air filter box.
3. Remove four wing nuts holding cover assembly to secondary air filter housing.
4. Remove filter element.
5. Inspect gaskets on both sides of filter. Replace if required.
6. Coat top and bottom gaskets of filter with a generous amount of grease.
7. Check condition of air box and replace if necessary. Install filter into airbox. Be sure filter element seats securely.
8. Check cover gasket and replace if required. Be sure cover is seated properly and wing nuts are finger tightened securely.
9. Reinstall primary air filter box as per instructions found on page 95.
10. Reinstall ATV seat.

Cleaning the Main Filter

Important:

It is advisable to replace the filter when it is dirty. However, in an emergency it is permissible to clean the main filter if you observe the following practices.

1. **Never** immerse the filter in water since dirt can be transferred to the clean air side of the filter.
2. If compressed air is used **never** exceed a pressure of 40 PSI. Always use a dispersion type nozzle to prevent filter damage and clean from the outside to the inside.

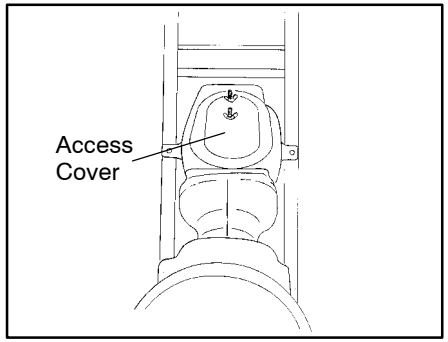
NOTE: Replace the air filter every 50 hours, and possibly more often in very dirty conditions.

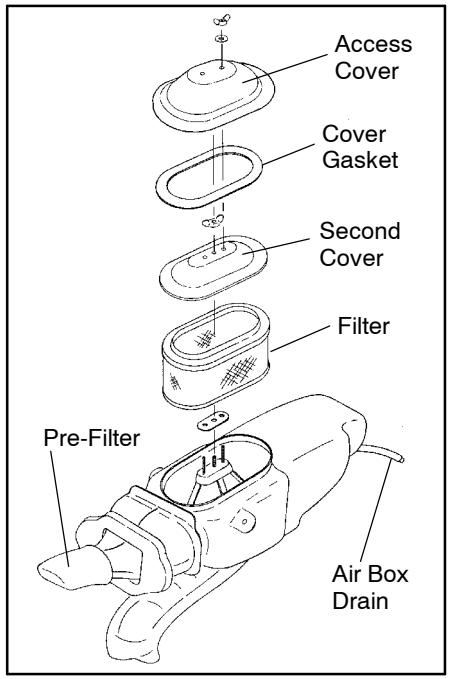
MAINTENANCE

Air Filter Service
Magnum 2 x 4, Magnum 4 x 4

It is recommended that the air filter be inspected weekly and replaced if dirty. When riding in extremely dusty conditions replacement will be required more often.

1. Lift up on the rear of the seat.
2. Pull the seat back and free of the tabs. **NOTE:** When reinstalling seat, make sure the slots in the seat engage the tabs in the fuel tank.
3. Remove the two wing nuts and washers securing the air filter access cover.
4. Remove the cover. Inspect the gasket. It should adhere tightly to the cover and seal all the way around.
5. Remove the wing nut and washer securing the second cover. The cover should be straight and not distorted.
6. Remove the air filter. Do not attempt to clean the main element.
7. Install new air filter. **NOTE:** Apply a small amount of general purpose grease to the sealing edges of the filter before installing.
8. Check air box drain tube. If oil or water deposits are found, drain them into a suitable container. **NOTE:** Service more frequently if vehicle is operated in wet conditions or at high throttle openings for extended periods.

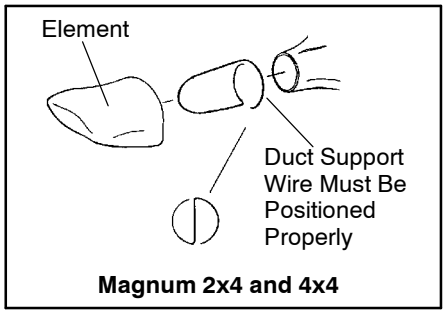




Primary Pre-Filter Service
Magnum 2x4 and 4x4

The pre filter should be cleaned before each ride, using the following procedure.

1. Remove pre-filter element. Note position of duct support wire. It must be properly positioned before reinstalling pre-filter.
2. Clean the element with high flash point solvent, followed by hot soapy water.
3. Rinse and dry thoroughly.
4. Inspect element for tears or damage.



Magnum 2x4 and 4x4

5. Apply foam filter oil or clean engine oil and squeeze until excess oil is removed.
6. Reinstall pre-filter element making sure duct support wire is in proper position. Secure using a cable tie. Do not tuck the element under the noise baffle foam.

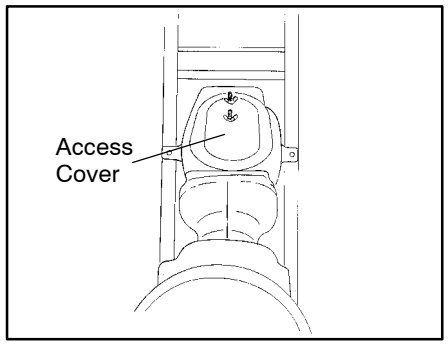
Air Box Drain

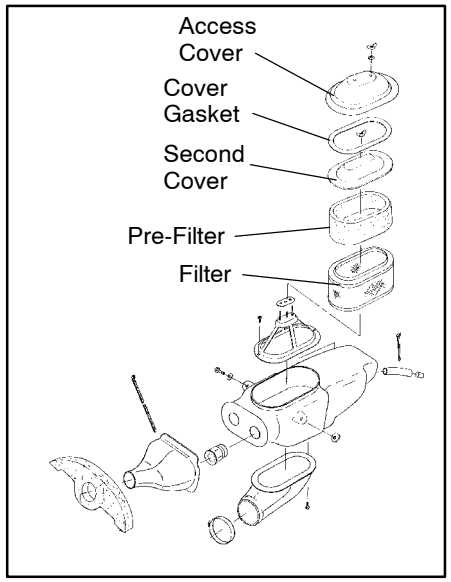
Periodically check the air box drain tube located on the bottom rear of the air box and empty if necessary.

MAINTENANCE

Air Filter Service
Sport, Scrambler 400

1. Release seat latch and lift up on the rear of the seat.
2. Pull the seat back and free the tab from front cab.
3. Remove the two wing nuts and washers securing the air filter access cover.
4. Remove the cover. Inspect the gasket. It should adhere tightly to the cover and seal all the way around.
5. Remove the wing nut and washer securing the second cover. The cover should be straight and not distorted.
6. Remove pre filter from main filter and discard the main air filter.
7. Carefully wash the pre-filter in soapy water and dry it.
8. Install dry pre-filter over new main filter and install. **NOTE:** Apply a small amount of general purpose grease to the sealing edges of the filter before installing.

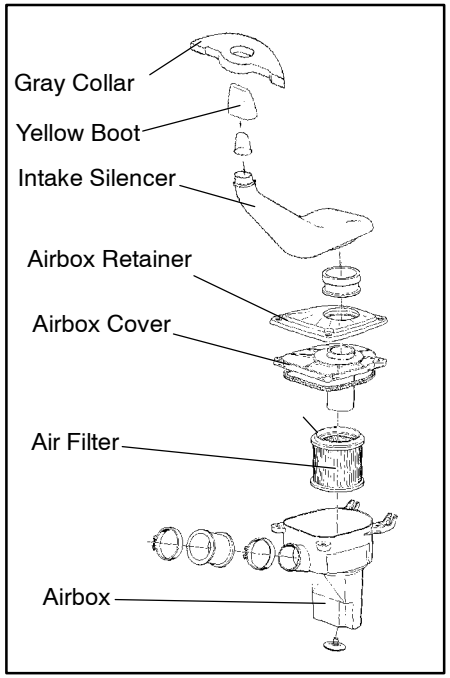


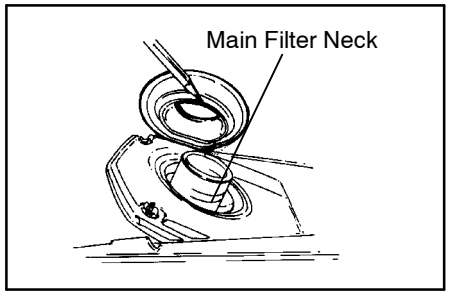


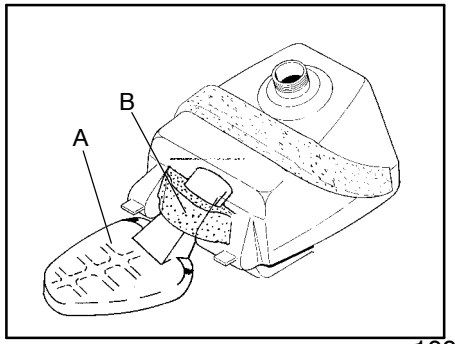
Air Filter Service
Trail Blazer

1. Release seat latch and lift up on the rear of the seat.
2. Pull the seat back and free of the tabs.
3. Remove the primary air filter box.
4. Remove the yellow pre-cleaner foam boot, held in place by a gray collar, from the air box. Do not remove the collar.
5. Carefully wash the yellow foam boot in soapy water and dry it.
6. Oil the foam boot with engine injection oil (1 to 2 teaspoons). Squeeze out the excess into an absorbant cloth.
7. Reinstall the yellow foam boot onto the air filter box.
8. Reinstall the primary air filter box removed in step 2. **NOTE:** There will be some resistance. Be sure the black rubber sealing ring is securely positioned over the main filter neck.

CAUTION: When installing the primary air filter box be sure the gray foam collar (B) is below the intake opening of the air box intake (A). Improper installation will restrict airflow to the engine possibly resulting in engine damage.



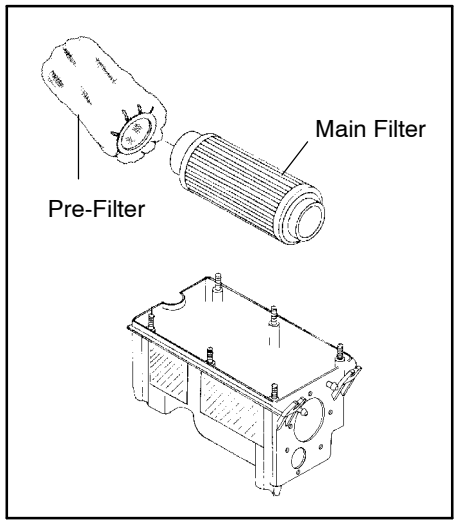




MAINTENANCE

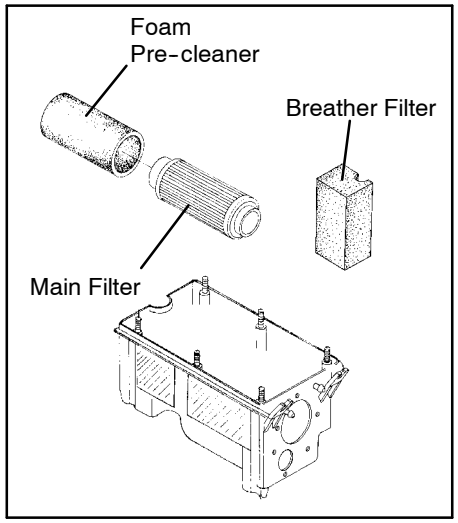
Air Filter Service
Scrambler 500

1. Remove seat.
2. Release clips and remove cover.
3. Loosen clamp and remove filter
4. Remove fabric type pre-filter from main filter. Wash pre-filter in soapy water and dry it.
5. Reinstall pre-filter in main filter. Replace main filter as required.



Air Filter Service
Sportsman 500, Xplorer 500

1. Remove seat.
2. Remove wingnuts securing the airbox lid and remove lid.
3. Pull foam breather filter out.
4. Loosen clamp and remove filter.
5. Remove foam pre-cleaner from main filter.
6. Wash the pre-filter in soapy water and dry it.
7. Install dry pre-filter over new main filter and reinstall.
8. Push foam breather filter straight down into airbox until flush with upper edge of box. Make certain foam is flush with front edge of airbox so air cannot enter engine breather fitting hole without first passing through the foam.

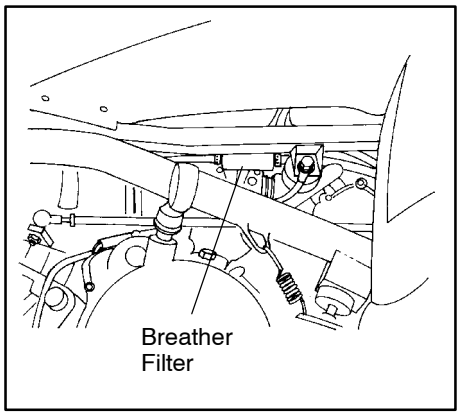


CAUTION: Operation of your ATV without a breather filter can cause engine damage.

Breather Filter and Hoses
Scrambler 500

⚠ **WARNING:** Do not perform this operation immediately after the engine has been run. The exhaust system becomes very hot and can cause severe burns.

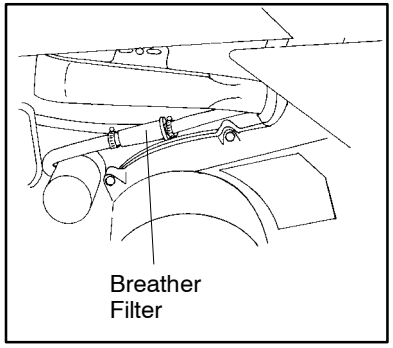
1. Remove heat shield screws and front fender to floorboard screws. Pull fender up and slide heat shield out the front.
2. Reach up under frame rail and remove clamps and filter.
3. Inspect filter for debris. Blow through gently in direction of arrow on filter to check for clogging. Replace as needed.
4. Check hoses for cracks, deterioration, abrasion, or leaks. Replace as needed.



5. Reinstall filter and clamps with arrow pointing toward engine. Reinstall heat shield. **NOTE:** Breather filter life is longer when airbox pre-filter is in place. Never operate ATV without pre-filter.

Breather Filter and Hoses
425 Engines

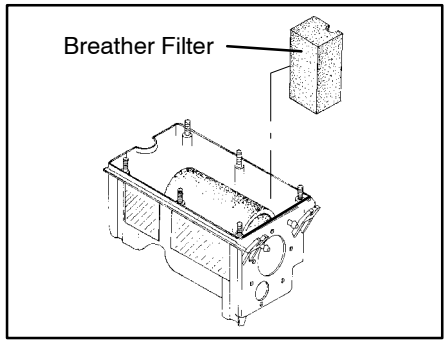
1. Remove the clamps and pull the filter out of the hoses. **NOTE:** It will not be necessary to remove the lower hose from the engine.
2. Inspect filter for debris. Blow through gently in direction of arrow on filter to check for clogging. Replace as needed.
3. Check hoses for cracks, deterioration, abrasion, or leaks. Replace as needed.



4. Reinstall filter and clamps with arrow pointing toward engine. **NOTE:** Breather filter life is longer when airbox pre-filter is in place. Never operate the ATV without the pre-filter.

MAINTENANCE

Breather Filter and Hose
Sportsman 500, Xplorer 500



1. Remove seat and airbox lid.
2. Locate foam breather filter which is in the front left corner of airbox covering the engine breather hose fitting hole on the front inside of the airbox.
3. Pull filter out and blow off with compressed air. If filter still has debris lodged in the foam, wash in high flash point solvent. Gently squeeze out excess solvent and dry. Do not oil.
4. Push foam filter straight down into airbox until flush with upper edge of box. Make sure foam is flush with front edge of airbox so air cannot enter engine breather fitting hole without passing through foam.
5. Check hose for cracks, deterioration, abrasion, or leaks. Replace as needed. **NOTE:** Filter is not needed for oil tank vent hose outlet on right side of airbox. Always install foam filter on left side of airbox.

Steering Inspection

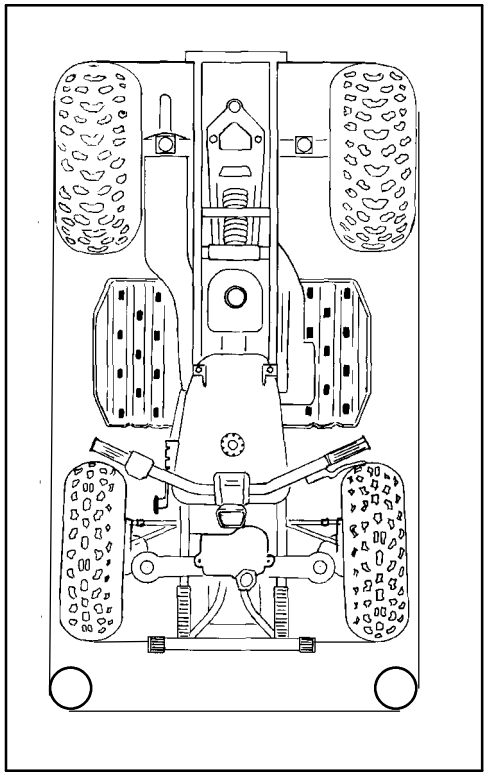
The steering assembly of the machine should be checked periodically for loose nuts and bolts. If loose nuts and bolts are found, have your dealer tighten them before riding your vehicle.

Camber and Caster

The camber and caster are non-adjustable.

Toe Alignment

You can check the toe alignment of the vehicle using the following method. The recommended toe alignment is 1/8″ to 1/4″ (.3 to .6 cm) toe out. If you discover improper adjustment have your dealer correct it.



1. Set the handlebars in a straight ahead position and hold them in this position. **NOTE:** The steering frog can be used as an indicator of whether the handlebars are straight. The frog should always point straight back from the steering post.
2. Place stands in front of the machine, perpendicular to the rear tires.
3. Tie an elastic string around the machine, making sure string just touches side surface of the rear tires on each side of machine and goes around the stands in front of the machine.
4. Measure from string to rim at front and rear of front rim. Rear rim measurement should be 1/16″ - 1/8″ (.2 to .3 cm) more than front rim measurement.
5. If this measurement needs to be adjusted, contact your dealer for service.

⚠ **WARNING:** Do not attempt to adjust the tie rod for toe alignment. Severe injury or death can result from improper adjustment. Contact your Polaris dealer. He/she has the training and tools to make these adjustments.

MAINTENANCE

Front Brake

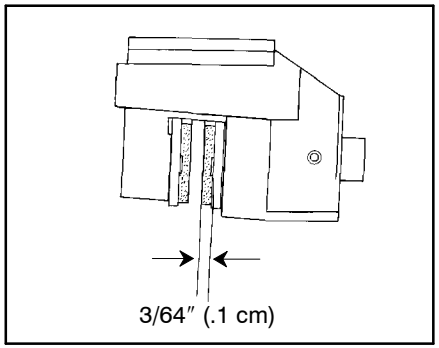
The front brakes are hydraulic disc type brakes which are activated by the brake lever being moved toward the handlebar. These brakes are self-adjusting and require no adjustment.

The following checks are recommended to keep the brake system in good operating condition. How often they need checking depends upon the type of driving that has been done.

- Keep fluid level in the master cylinder reservoir between the max and min level marks at all times. Normal functioning of the diaphragm is to extend into the reservoir as fluid level drops. If the fluid level is low and the diaphragm is not extended, a leak is indicated and the diaphragm should be replaced. Always fill the reservoir as indicated whenever the cover is loosened or removed to insure proper diaphragm operation. Use Polaris DOT 3 brake fluid (PN 2870990).

WARNING: Once a bottle of brake fluid is opened, use what is necessary and discard the rest. Do not store or use a partial bottle of brake fluid. Brake fluid is hygroscopic, meaning it rapidly absorbs moisture from the air. This causes the boiling temperature of the brake fluid to drop, which can lead to early brake fade and the possibility of serious injury.

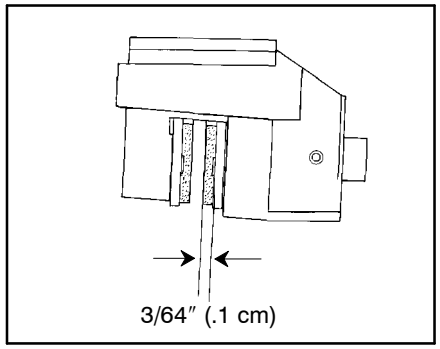
- Check brake system for fluid leaks.
- Check brake system for fluid leaks.
- Check brake for excessive travel or spongy feel.
- Check friction pads for wear, damage and looseness.
- Check security and surface condition of the disc.
- Pads should be changed when worn to 3/64″ (.1 cm), or about the thickness of a dime.



Rear and Auxiliary Mechanical Brake

Rear Brake

The rear brake is a hydraulic disc type brake which is activated by the same lever which activates the front brake system. The rear brake system is self adjusting and requires no maintenance other than periodic checks of the pads for wear.



Wear Line

- Pads should be changed when worn to 3/64″ (.1 cm) which is about the thickness of a dime.
- Inspect the brake disc spline and pad wear surface for excessive wear.

Auxiliary Mechanical Brake System

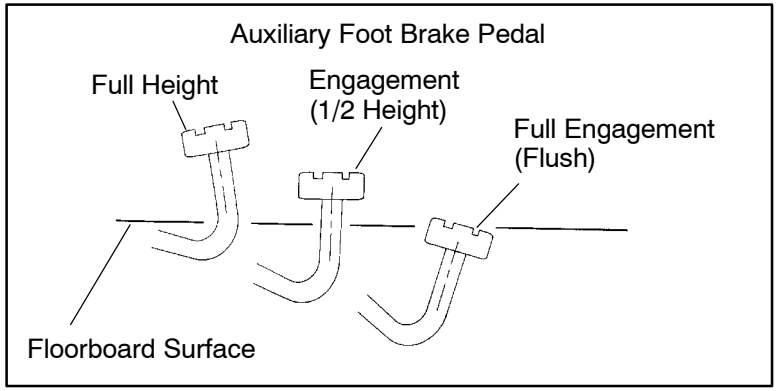
The auxiliary brake system is intended to be used as a backup for the hydraulic service brake system. Should the hydraulic system fail, the rear brake can be activated by depressing the foot pedal on the inside of the right floorboard.

NOTE: Since this is a rear brake only, it will not be as effective as the all wheel system.

Auxiliary Brake Adjustment (Mechanical)

The auxiliary brake should be checked for proper adjustment.

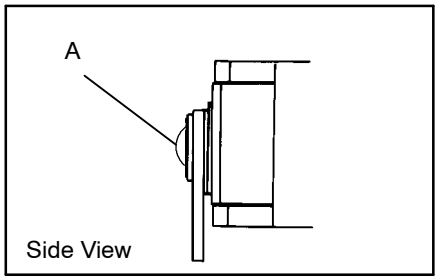
1. Support the rear wheels off the ground.
2. While turning the rear wheels by hand, apply the auxiliary foot brake. This brake should not stop the wheels from turning until the lever is half way between its rest position and bottoming on the footrest.



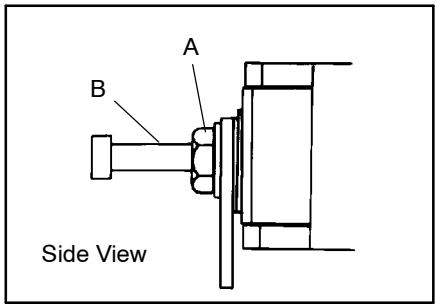
Auxiliary Brake Adjustment (Cont.)

Polaris ATVs have two different types of auxiliary brake adjustment. Consult your owner's manual supplement to determine what type your machine has and adjust accordingly.

1. **Type I:** If adjustment is necessary turn adjuster bolt (A) clockwise until disc rotation becomes difficult. Turn adjuster bolt counterclockwise until brake engagement starts at approximately 1/2 of the total pedal travel (See Illustration).
2. **Type II**:If adjustment is necessary, loosen jam nut (A) and turn adjuster bolt (B) clockwise until disc rotation becomes difficult. Turn adjuster bolt counterclockwise until brake engagement starts at approximately 1/2 of the total pedal travel (See Illustration). Lock the locknut.
3. Check the auxiliary brake deflection daily.



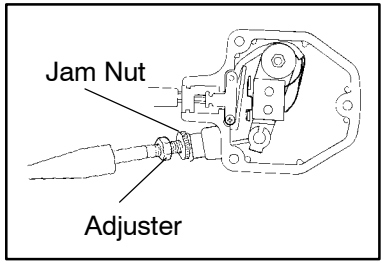
Auxiliary Brake Adjustment - Type I

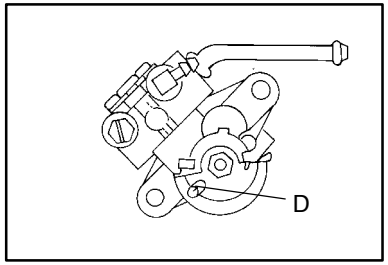


Auxiliary Brake Adjustment - Type II

Oil Pump Adjustment Procedure 400 Engines

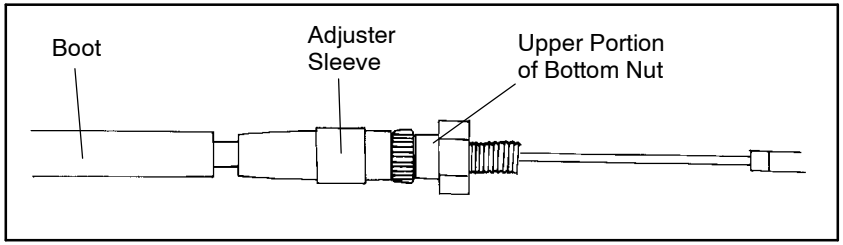
1. Before adjusting the oil pump, check engine idle RPM and carburetor adjustments which are found in the owner's manual supplement.
2. Remove electronic throttle control (ETC) cover.
3. Loosen throttle cable jam nut and turn adjuster in or out until there is 1/16″ (.16 cm) of throttle lever travel before throttle slide starts to open.
4. Place very slight pressure on the throttle lever until all freeplay is removed from throttle cable (to the point where the carb slide is just starting to rise).
5. Lift boot up off adjuster sleeve. Remove the oil pump cover. Loosen the cable adjuster locknut. Adjust oil pump cable until marks align (D) when the throttle slide just begins to raise.





Oil Pump Adjustment 400

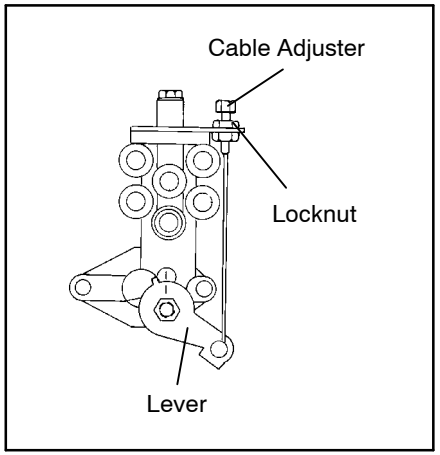
6. Tighten the locknut.
7. Recheck adjustment. If correct, slide boot all the way down over the upper portion of the bottom nut to ensure good sealing against water entry. Reinstall oil pump cover gasket.
8. Reinstall the ETC cover removed in step 2, making sure cover gasket is properly seated. If not, moisture will enter the ETC and damage the switch.

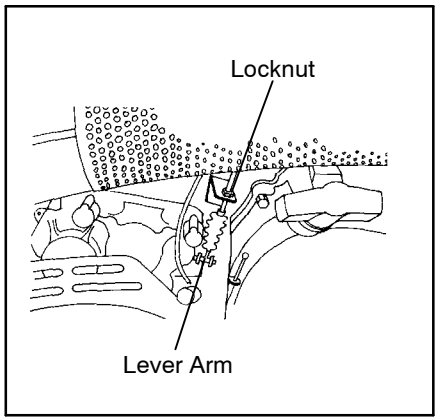


MAINTENANCE

Oil Pump Adjustment Procedure 250 and 300 Engines

1. Before adjusting the oil pump, check engine idle RPM and carburetor adjustments which are found in the owner's manual supplement.
2. Remove electronic throttle control (ETC) cover.
3. Loosen throttle cable jam nut and turn adjuster in or out until there is 1/16″ (.16 cm) of throttle lever travel before throttle slide starts to open.
4. Place very slight pressure on the throttle lever until all freeplay is removed from throttle cable (to the point where the carb slide is just starting to rise).
5. Loosen locknut. Turn adjuster in or out until all freeplay is removed from oil pump cable (the point where the oil pump arm is just starting to move off of its stop). The pump stop keeps the pump arm from rotating any farther down than the idle position so no visual alignment of marks is necessary. Tighten the locknut





Oil Pump Bleeding Procedure

1. Fill the oil reservoir with Polaris injector oil.
2. Loosening the bleeder screw is only necessary when the oil supply line has been disconnected from the pump or the oil reservoir and supply line have been completely run out of oil. In these cases, loosen the pump bleed screw one full turn. Allow oil to flow from the bleed screw for five to ten seconds. Tighten bleed screw. **CAUTION:** Never run the engine with the bleed screw loose. Loss of oil will cause serious engine damage.
3. Start the engine and rotate the oil pump lever to its full open position. With the engine at idle, hold the lever up for thirty seconds to make sure all air is out of the system.

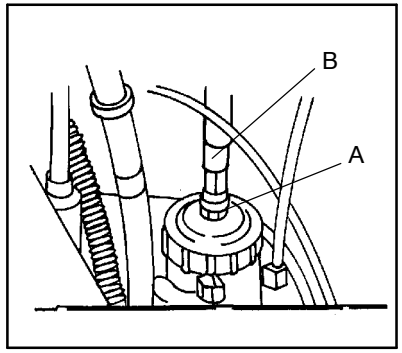
Throttle Cable Adjustment
400 Engines

Vehicles with 400 engines do not utilize a cable sleeve jam nut. You will need to bottom the cable to the carburetor slidevalve cap. Adjust at throttle cable adjuster on throttle block.

Throttle Cable
250 and 300 Engines

If the proper throttle freeplay cannot be obtained with the throttle block adjuster, adjust cable at carburetor using the following procedure.

Loosen throttle cable sleeve jam nut (A) located on the carburetor slidevalve cap. Rotate cable sleeve (B) counterclockwise until carb slide and oil pump lever rise together when throttle lever is being depressed slightly. This can be checked by placing the transmission in neutral, idling the engine, and observing the oil pump lever while depressing the throttle lever slightly. The lever should begin moving when the engine RPM begins to increase.



MAINTENANCE

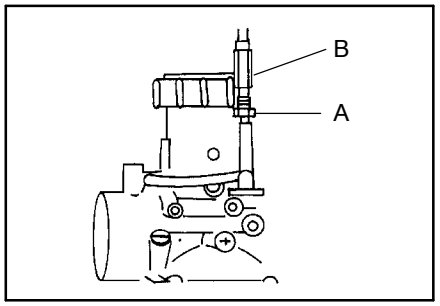
Engine Choke Adjustment
2 Cycle Engines

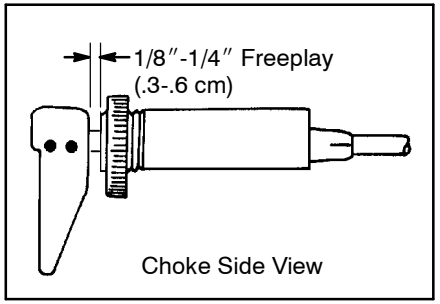
With the dash mounted choke control toggle flipped to full off position, the choke plunger must be seated on the fuel passageway in the carburetor. If the plunger is not seated on the passageway, the engine will flood or run too rich, causing spark plug fouling and very poor engine performance.

If there is too much choke cable slack resulting in excessive toggle free play, the engine will be hard starting when cold and the half-on choke position used for intermittent applications will not function.

Choke Adjustment Procedure

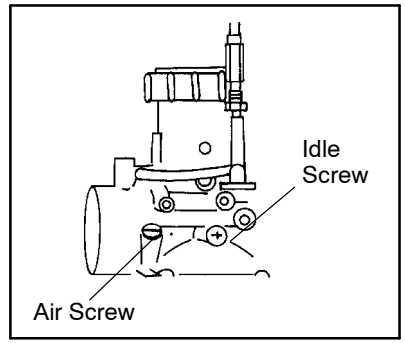
1. Flip choke toggle to the full off position.
2. Loosen adjustment locknut (A) on carburetor.
3. Turn cable sleeve adjusting nut (B) clockwise on carburetor until 1/8″ (.3 cm) or more choke toggle free play is evident.
4. Turn the cable sleeve adjusting nut counterclockwise on the carburetor until the toggle has zero free play. Then rotate it clockwise until 1/8″ to 1/4″ (.3 to .6 cm) toggle free play is evident.
5. Tighten adjustment locknut.





Carburetor/Engine Idle RPM Adjustment
2 Cycle Engines

If the engine idle speed is not satisfactory, and all other conditions are favorable, the carburetor can be adjusted as follows:

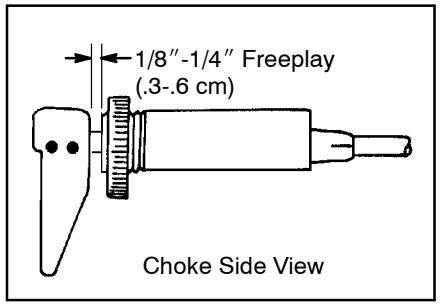


1. Warm up the engine by running the vehicle approximately five minutes.
2. Place the transmission in gear with the parking brake applied.
3. Adjust the carburetor idle screw in or out until the desired idle RPM is reached . Turning the screw in (clockwise) will raise RPM. Turning the screw out (counterclockwise) will lower RPM.

The following variations to air screw adjustment should be noted:

- For improving cold weather start and reducing audible detonation noise, the air screw can be closed from 1/2 to 1 turn by turning the screw clockwise.
- During hot weather and/or high altitude operation the air screw can be adjusted for smooth operation by approximately 2 turns counterclockwise.

Choke Adjustment Procedure
4-cycle Engines

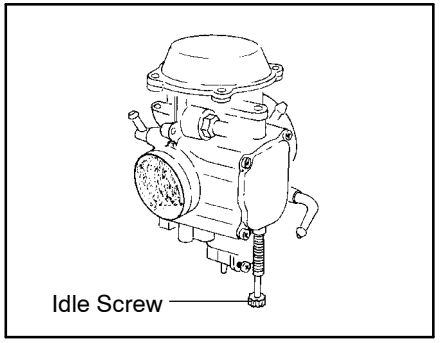


1. Flip choke toggle to the full off position.
2. Slide boot off in-line cable adjuster sleeve. Loosen adjustment locknut on in-line cable adjuster.
3. Turn cable sleeve adjusting nut clockwise on in-line adjuster until 1/8″ (.3 cm) or more choke toggle free play is evident.
4. Turn the cable sleeve adjusting nut counterclockwise on the in-line cable adjuster until the toggle has zero free play. Then rotate it clockwise until 1/8″ to 1/4″ (.3 to .6 cm) toggle free play is evident.
5. Tighten adjustment locknut.
6. Slide boots back over cable adjuster sleeve until they touch at the middle point of the sleeve.

Carburetor/Engine Idle RPM Adjustment 4-cycle Engines

If the engine idle speed is not satisfactory, and all other conditions are favorable, the carburetor can be adjusted as follows:

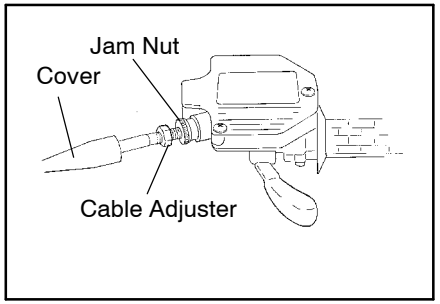
1. Warm up the engine by running the vehicle approximately five minutes.
2. Place the transmission in gear with the parking brake applied.
3. Adjust the carburetor idle screw in or out until the desired idle RPM is reached. Turning the screw in (clockwise) will raise RPM. Turning the screw out (counterclockwise) will lower RPM.



Throttle Cable Free Play Adjustment

Throttle cable free play is adjusted at the handlebar.

1. Slide the protective cover back.
2. Loosen jam nut.
3. Turn adjuster until 1/16″ free play is achieved.
4. Tighten jam nut and replace protective cover.



Spark Plugs

Check your owner's manual supplement for recommended spark plug and gap.

The spark plug and its condition is indicative of engine operation. The spark plug firing end condition should be read after the engine is warmed up and the vehicle is driven at higher speeds. Immediately check the spark plug for correct color.

1. Normal

The insulator tip is gray, tan or light brown. There will be few combustion deposits. The electrodes are not burned or eroded. This indicates the proper type and heat range for the engine and the service.

NOTE: The tip should not be white. A white insulator tip indicates overheating, caused by use of an improper spark plug or incorrect carburetion adjustments.

2. Wet Fouled

The insulator tip is black. A damp oil film covers the firing end. There may be a carbon layer over the entire nose. Generally, the electrodes are not worn. General causes are excessive oil, use of non-recommended injection oil, improper use of the choke, or incorrect carburetion adjustments.

Spark Plug Removal and Replacement

⚠ **WARNING:** Never attempt to remove a spark plug while the engine is warm. The exhaust system or engine could burn you causing severe injury.

The spark plug is removed by using the special wrench provided in the tool pouch under the seat. Reach under the right hand fender and then back for access. Remove the spark plug cap and then the spark plug by rotating counterclockwise.

Reverse the procedure for spark plug installation. Torque to 17 ft. lbs.

Never deviate from the recommended spark plug as engine damage can occur.

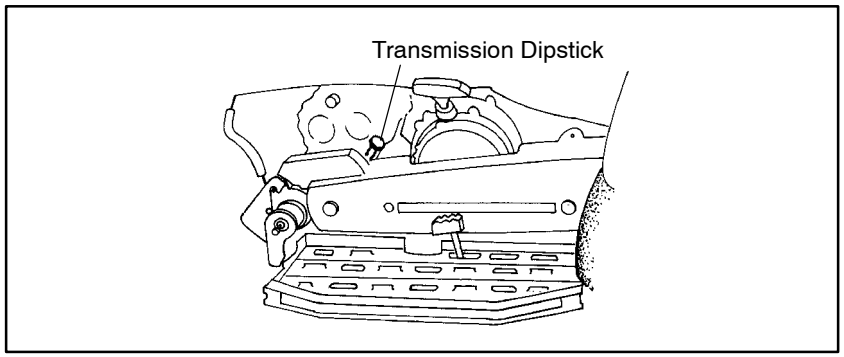
Cylinder Head/Cylinder Base Fastener Torque

(2 Stroke Models)

Have your dealer check the ATV cylinder head and cylinder base fasteners for proper torque at the first service or after 25 hours.

MAINTENANCE

Transmission Lubrication

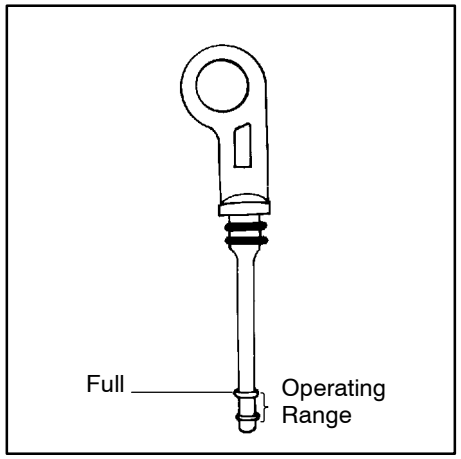


The transmission dipstick is located on the right side of the machine.

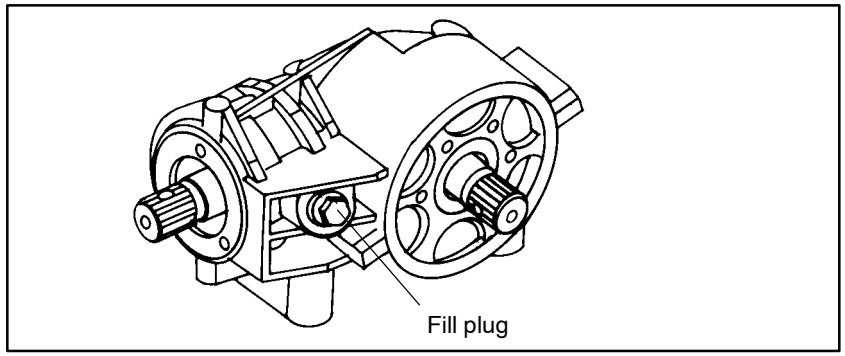
The transmission lubricant level should be checked monthly or 1000 miles (1600 km), whichever comes first. Transmission oil should be changed annually. With the ATV on a level surface, remove fill plug dipstick and check the lubricant level. Lubricant should be kept at the full mark on the dipstick. The correct transmission lubricant to use is Polaris Premium Synthetic Gearcase Lubricant (PN 2871478).

Transmission Oil Changing Procedure

1. Remove skid plate.
2. Remove fill plug/dipstick.
3. Remove transmission drain plug located on the bottom right hand side and drain the oil. Catch and discard used oil properly.
4. Clean and reinstall the drain plug.
5. Add Polaris Premium Synthetic Gearcase Lubricant (PN 2871478 - 12 oz. bottle) to full mark on the fill plug/dipstick.
6. Check for leaks.
7. Reinstall skid plate removed in step 1.



Front Gearcase Lubrication
Sport 500, Xplorer 500, Scrambler 400



Front Gearcase Lubrication

The front gearcase fill plug is located on the right side of the machine.

The front gearcase lubricant level should be checked every six months or 1000 miles (1600 km), whichever comes first. Front gearcase oil should be changed annually. With the ATV on a level surface, remove fill plug and check the lubricant level. Lubricant should be kept at the full mark on the bottom of fill plug threads. The correct gearcase lubricant to use is GL5 80-90 Weight Gear Lube.

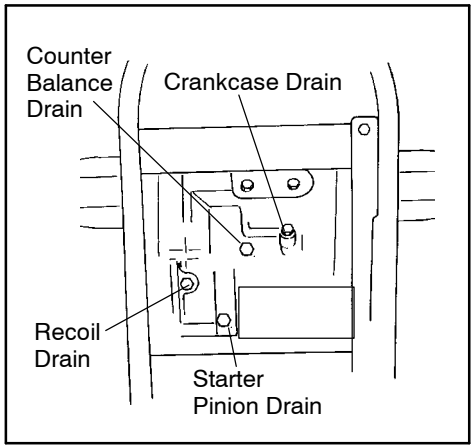
Gearcase Oil Changing Procedure

1. Remove fill plug.
2. Remove gearcase drain plug located on the bottom right hand side and drain the oil. Catch and discard used oil properly.
3. Clean and reinstall the drain plug and tighten securely (14 ft. lbs/1.93 kgm).
4. Add GL5 80-90 Weight Gear Lube to the top thread on the fill hole.
5. Reinstall filler plug.
6. Check for leaks.

MAINTENANCE

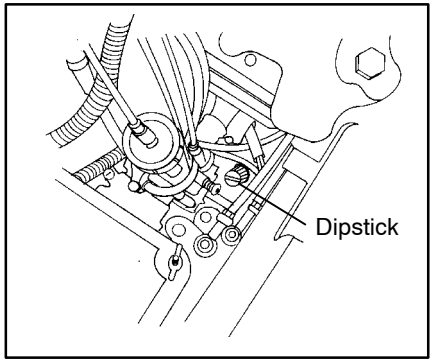
Counter Balance Lubrication 400 Engines

The counter balance oil should be checked semi-annually and oil should be added or changed as necessary. The oil should be changed annually, especially before off season storage. If the machine is used in wet conditions the oil should be checked more frequently. If the oil has a milky appearance it should be changed as soon as possible. Failure to properly maintain this important area can result in premature wear or possible failure of the counter balance components. Always use SAE 10W30 oil.



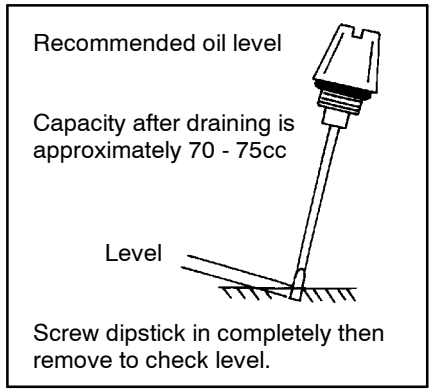
Procedure for Adding Oil

1. Remove seat and locate dipstick.
2. Remove dipstick. Oil level is shown on dipstick.
3. Add SAE 10W30 oil with a transmission fluid funnel until oil is at the proper level on the dipstick (See Ill.). If overfilled, excess oil will be expelled through the vent hose.
4. Reinstall dipstick.

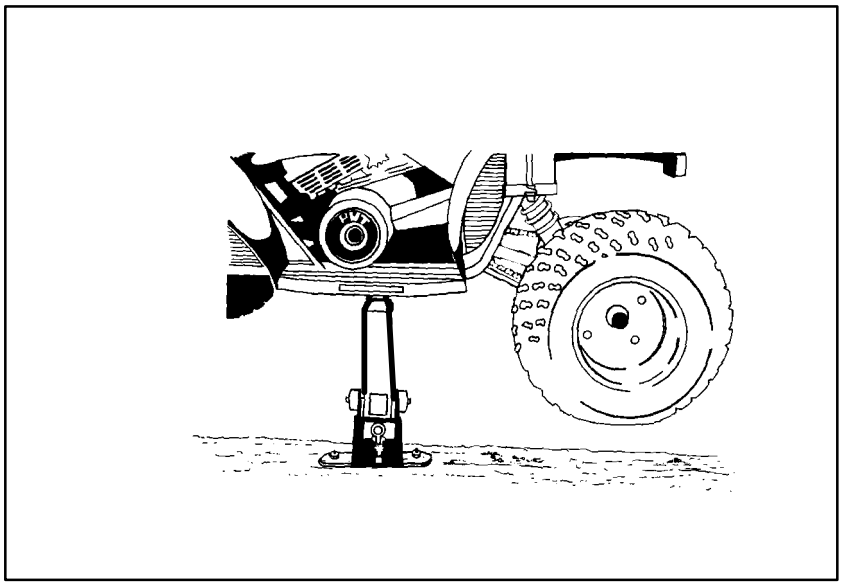


Counter Balance Oil Changing Procedure

1. Remove skid plate.
2. Remove counter balance drain plug. Catch used oil and discard of properly.
3. Clean and reinstall drain plug.
4. Add 10W30 oil to full mark on dipstick. Capacity after draining is approximately 70-75 cc (2.3 - 2.5 oz).
5. Reinstall dipstick and check for leaks.


Recommended oil level
Capacity after draining is approximately 70 - 75cc
Level
Screw dipstick in completely then remove to check level.

Wheel Removal Front or Rear



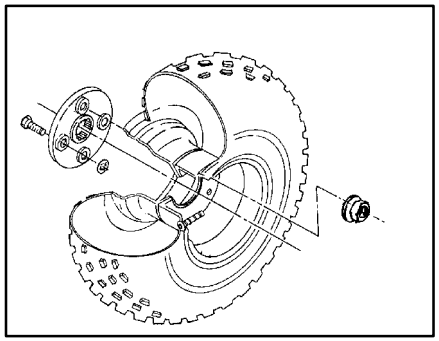
Wheel Removal Procedure

1. Stop the engine, place the transmission in gear and lock the parking brake.
2. Loosen the wheel nuts slightly.
3. Elevate the side of the vehicle by placing a suitable stand under the footrest frame as shown.
4. Remove the wheel nuts and remove the wheel.

Wheel Installation

1. With the transmission in gear and the parking brake locked, place the wheel in the correct position on the wheel hub. Be sure the valve stem is toward the outside and rotation arrows on the tire point toward forward rotation.
2. Attach the wheel nuts and finger tighten them.
3. Lower the vehicle to the ground.
4. Securely tighten the wheel nuts according to the chart found on page 90:

CAUTION: If wheels are improperly installed it could affect vehicle handling and tire wear.



MAINTENANCE

Tire Inspection

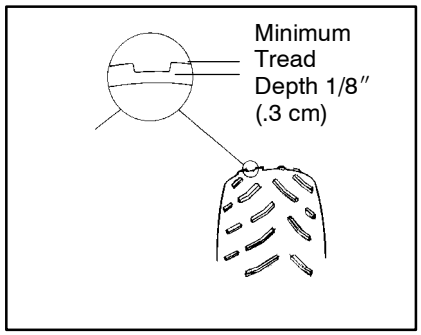
CAUTION: Maintain proper tire pressure according to charts below. Improper tire inflation may affect ATV maneuverability.

When replacing a tire always use original equipment size and type.

CAUTION: The use of non-standard size or type tires may affect ATV handling.

Tire Tread Depth

Always replace tires when tread depth is worn to 1/8″ (.3 cm) or less. Please refer to your Owner's Manual Supplement for tire specifications.



⚠ WARNING

Operating your ATV with worn tires will increase the possibility of the vehicle skidding easily with possible loss of control.

Worn tires can cause an accident.

Always replace tires when the tread depth measures 1/8″ (.3 cm) or less.

Drive Chain Inspection and Adjustment

Polaris ATV drive chains are equipped with O-ring sealed permanently greased pins and rollers. However, it is still necessary to lubricate the outer surfaces of the roller.

CAUTION: Never wash the chain with a high pressure washer or gasoline. Damage to the O-rings will result, causing premature wear and drive chain failure.

Always inspect the drive chain prior to operating the vehicle, checking for damaged or missing O-rings, rollers and correct slack adjustment. Maintain the stone guard to rear sprocket clearance at 1/8″ (.3 cm).

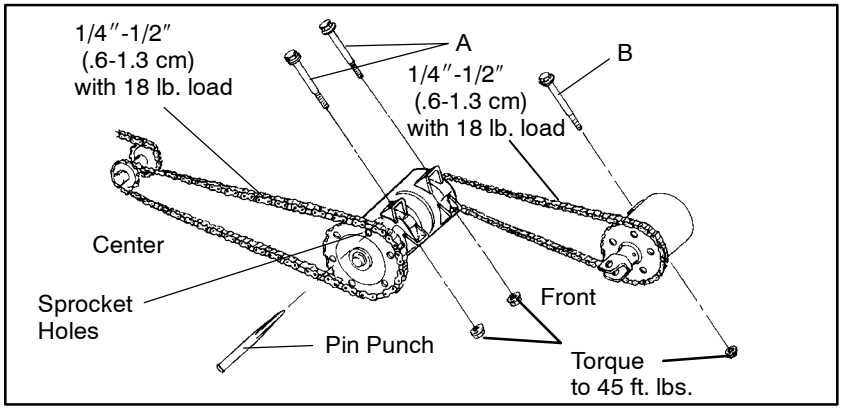
Regularly lubricate the drive chain with SAE 80-90 lube or an approved O-ring chain spray lube.

Center/Front Drive Chain Slack Adjustment

CAUTION: Never adjust or operate the vehicle with the front or center drive chain too loose or too tight as severe damage to the transmission and drive components can result.

Periodically remove the chain guards to check chain quality and adjustment.

The center chain should be adjusted first since this adjustment affects the front chain slack. After the recommended center chain adjustment is made, proceed to the front chain.



Center/Front Drive Chain Inspection/Adjustment Gen IV Models

1. Remove mudguard and footwell hardware.
2. Remove footwell. Loosen center chain eccentric clamp bolts (A).
3. Rotate vehicle forward or rearward until a sprocket hole aligns with hole provided in eccentric.
4. Insert a large punch or screwdriver through sprocket and into eccentric hole. Rotate vehicle rearward to tighten chain. Chain deflection should be 1/4″-1/2″ (.6-1.3 cm) with 18 lbs. (8.2 kg) of force at center of chain.

MAINTENANCE

Adjustment Procedure (cont.)

5. Tighten eccentric clamp bolts to 45 ft. lbs. (6.21 kg/m). Check chain tension.

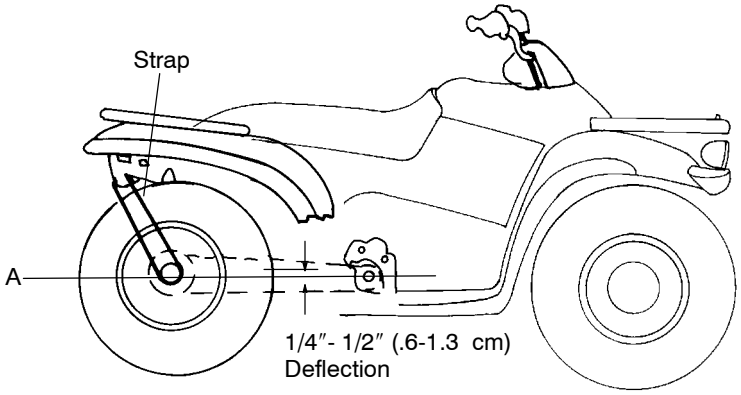
Gen II and III Models

1. Remove cotter pin and washer connecting brake pedal linkage to caliper actuating arm. Remove linkage from arm.
2. Remove right front fender mud flap foot board attaching hardware.
3. Remove center chain guard attaching hardware. Press brake pedal downward and remove guard.
4. Remove forward chain guard attaching bolts and guard.
5. Loosen center chain eccentric clamp bolts (A)
6. Rotate vehicle forward or rearward until a sprocket hole aligns with hole provided in eccentric.
7. Insert a large punch or screwdriver through gear and into eccentric hole. Rotate vehicle rearward to tighten chain. Chain deflection should be 1/4″-1/2″ (.6-1.3 cm) with 18 lbs. (8.3 kg) of force at center of chain.
8. Tighten eccentric clamp bolts to 45 ft. lbs. (6.21 kg/m). Check chain tension.
9. Loosen forward chain eccentric clamp bolt (B). Install punch in front sprocket as described previously and adjust chain to 1/4″-1/2″ (.6-1.3 cm) deflection with 18 lbs. (8 kg) of force at center of chain.
10. Tighten forward eccentric clamp bolt to 45 ft. lbs. (6.21 kg/m). When this bolt is tightened the chain deflection may change slightly. Check deflection and adjust again if needed.

Rear Drive Chain Slack Adjustment

CAUTION: Never adjust or operate the vehicle with the rear drive chain too loose or too tight as severe damage to the transmission and drive components can result. Chain tension must be inspected with the swing arm in the position shown in illustration.

Check the amount of chain slack by moving the vehicle slightly forward to gain slack at the top side of the rear chain. Collapse the suspension by using an adjustable (buckle type) trailer tie down. Fasten the strap around the axle and rear bumper tube. Tighten until a straight line (A) can be drawn from the axle to the transmission output shaft intersecting the swing arm pivot. This establishes the tightest chain position. At this point the chain should have 1/4″-1/2″(.6cm-1.3cm) deflection. If the chain needs adjustment, use the following procedure.

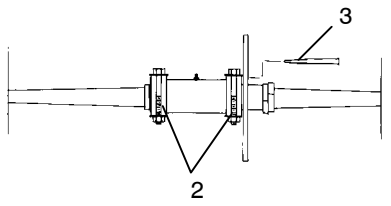


(Freeplay of chain - no force applied to chain)

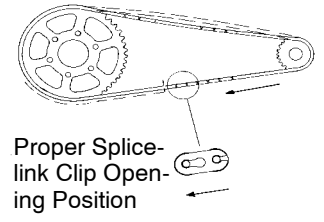
Adjustment Procedure

1. Loosen chain guard.
2. Loosen two eccentric locking bolts.
3. Insert a pin punch through the sprocket hub and into the eccentric axle housing.
4. Roll the vehicle ahead or back to adjust chain slack to the proper dimension.
5. Tighten the eccentric locking bolts to 60 ft. lbs. (8.3 kg/m).
6. Reinstall chain guard.

NOTE: Reposition chain guide to allow 1/8″ (.3 cm) clearance between sprocket and guide.



Rear Drive Chain Adjustment



Proper Splice-link Clip Opening Position

MAINTENANCE

Headlight Lamp Replacement

⚠ **WARNING:** Due to the nature of ATVs and where they are ridden, headlight and taillight lenses become dirty. Frequent washing is necessary to maintain lighting quality. Poor lighting while riding can result in severe injury or death.

CAUTION: Do not service while headlight is hot. Serious burns may result.

NOTE: Do not touch a halogen lamp with bare fingers. Oil from your skin leaves a residue, causing a hot spot which will shorten the life of the lamp.

Headlight Lamp Installation - Scrambler

1. Remove wire harness connector from the back of headlight.
2. Grasp bulb housing, turn counterclockwise and remove bulb.
3. Install bulb into headlight housing and rotate clockwise firmly. **NOTE:** bulb is to be positioned so the harness installs into the lamp at the bottom.
4. Reinstall connector.

High Beam Headlight Adjustment

The headlight beam can be adjusted up and down.

1. Place the vehicle on a level surface with the headlight approximately 25’ (7.6 m) from a wall.
2. Measure the distance from the floor to the center of the headlight and make a mark on the wall at the same height.
3. Start the engine and turn the headlight switch to high beam.
4. Observe headlight aim. The most intense part of the headlight beam should be aimed 2″ (5.1 cm) below the mark placed on the wall in step 2. **NOTE:** Rider weight must be included on the seat.
5. Loosen pivot bolt and adjust beam to desired position.
6. Tighten nut and bolt. Torque to 60 in. lbs.

Headlight Lamp Replacement
Trail Blazer, Sport

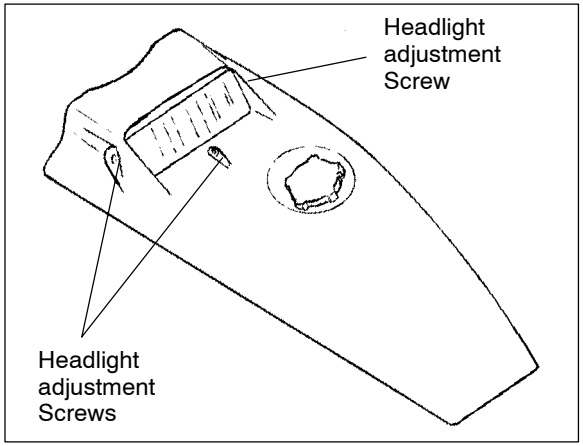
WARNING: Due to the nature of ATVs and where they are ridden, headlight and taillight lenses become dirty. Frequent washing is necessary to maintain lighting quality. Poor lighting while riding can result in severe injury or death.

CAUTION: Do not service while headlight is hot. Serious burns may result.

1. Remove rubber cap from back of headlight to reveal retention screw.
2. Remove small phillips head screw, and carefully remove bulb from housing.
3. Gently unplug headlight lead wire from yellow jumper, and ground wire from terminal board.
4. Insert new bulb into housing and tighten retention screw.
5. Plug lead and ground wire back into terminal board and jumper.
6. Mount cover to machine.
7. Properly adjust headlight aim.

Headlight Adjustment

1. Place the vehicle on a level surface with the headlight approximately 25' (7.6 m) from a wall.
2. Measure the distance from the floor to the center of the headlight and make a mark on the wall at the same height.
3. Start the engine and turn on headlight.
4. Observe headlight aim. The most intense part of the headlight beam should be aimed 8″ (20.3 cm) below the mark placed on the wall in step 2. **NOTE:** Rider weight must be included on the seat.

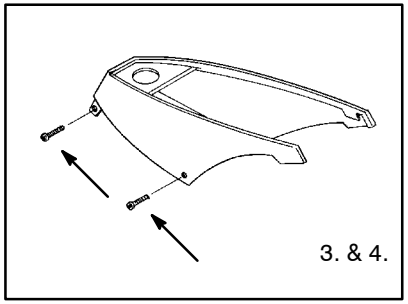


5. Adjust beam to desired position by turning adjustment screws in headlight cover. Turning right screw clockwise moves the intense spot of light up to the left. Turning the left screw clockwise moves intense spot of light up to the right. Turning the bottom screw clockwise adjusts the light upwards.

MAINTENANCE

Headlight Lamp Replacement
Magnum 2x4, Magnum 4x4, Trail Boss

1. Remove the seat.
2. Remove the plastic panel surrounding the upper portion of the gas tank by first removing the gas tank cap.
3. Remove the Phillips head screws on either side of the panel at the junction of this panel, the lower panels, and the rear of the front fenders.
4. Remove the Phillips head screws on either side of the rear of the upper panel which were revealed by the removal of the seat., and starter pinion
5. Remove the door on the front of the ATV covering the radiator cap by using a stubby, flat screwdriver to disengage the screw. Remove the door and set it aside.
6. Disengage the tabs at the front of the upper panel where they snap into the lower panel surrounding the headlight assembly. Also disengage the tabs on the upper panel which engage with the lower triangular panels on either side of the machine. Lift off the upper panel and set it aside.
7. Reinstall the gas tank cap.
8. Remove the panel surrounding the headlight by removing the Phillips head machine screws from either side of this panel. Also remove the two Torx screws at the rear of this panel.
9. Ease the panel forward and up to allow you to reach the socket connected to the headlight lamp.



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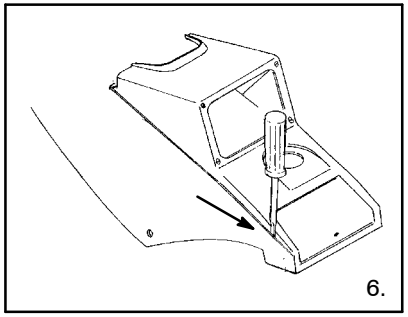

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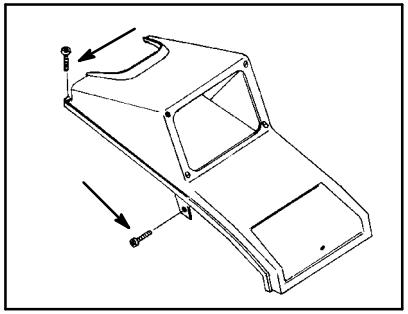


Headlight Adjustment

10. Carefully unplug the socket from the lamp. Remove the panel and set it aside.
11. Replace the oil reservoir cap.
12. Stand the panel containing the headlight assembly on end to allow access to the back of the headlight assembly.
13. Disengage the wire bail holding the headlight lamp in place and move it out of the way.
14. Grasp the base of the lamp and lift it out.
15. Reverse the previous steps to replace the lamp and reassemble the panels.

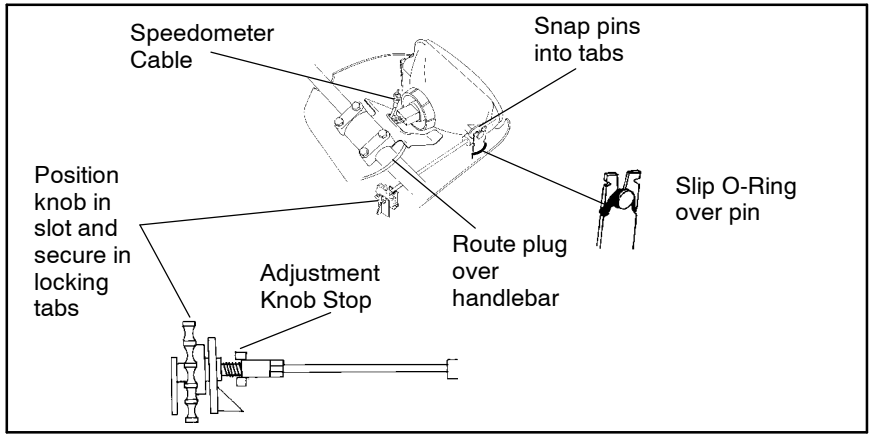
High Beam Headlight Adjustment

The headlight beam can be adjusted to any position desired by turning the four screws at the outer corners of the lamp housing.

1. Place the vehicle on a level surface with the headlight approximately 25’ (7.6 m) from a wall.
2. Measure the distance from the floor to the center of the headlight and make a mark on the wall at the same height.
3. Start the engine and turn the headlight switch to high beam.
4. Observe headlight aim. The most intense part of the headlight beam should be aimed 2″ (5.1 cm) below the mark placed on the wall in step 2. **NOTE:** Rider weight must be included on the seat. For machines with separate low beam lights, the drop on low beam should be 8″ (20.3 cm) in 25’.
5. Adjust beam to desired position by turning screws on the housing.

MAINTENANCE

Headlight Lamp Replacement
Xplorer 400, Xplorer 500, Sportsman 500


Speedometer Cable
Snap pins into tabs
Position knob in slot and secure in locking tabs
Slip O-Ring over pin
Route plug over handlebar
Adjustment Knob Stop

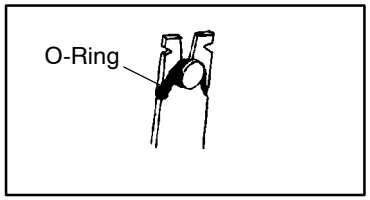
1. Remove Phillips screws from bottom of headlight pod at each front corner. **NOTE:** To aid in accessing these screws, it may be helpful to turn handlebars to left or right and use a short, stubby screwdriver. Removal of the front rack and cover may also allow easier access.
2. Remove three Phillips screws at back of headlight pod.
3. Lift pod cover up. Using a pliers, disconnect speedometer cable. Unplug indicator lights from harness and remove pod cover.
4. Unplug headlamp from wiring harness.
5. Remove boot and locking collar from back of lamp housing.
6. Grasp base of lamp and lift it out.
7. Reverse previous steps to replace lamp and reassemble pod. Make sure tab on lamp locks into place in housing.

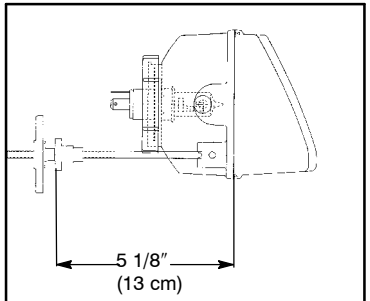
High Beam Headlight Adjustment

The headlight beam can be adjusted to any position desired by turning the adjusting knob located on the bottom right side of the headlight pod.

Headlight Housing Replacement

1. Remove Phillips screws from bottom of headlight pod at each front corner. **NOTE:** To aid in accessing these screws, it may be helpful to turn handlebars to left or right and use a short, stubby screwdriver. Removal of the front rack and cover may also allow easier access.
2. Remove three Phillips screws at back of headlight pod.
3. Lift pod cover up. Using a pliers, disconnect speedometer cable. Unplug indicator lights from harness and remove pod cover.
4. Unplug headlamp from wiring harness.
5. Remove O-Ring from headlight pivot pins.
6. Pull headlight housing up to release from locking tabs.
7. Lift adjusting knob up to remove from locking tabs.
8. Carefully pull assembly up and out of pod.
9. Reverse steps to install new housing and reassemble pod.
10. Adjust headlight aim by turning adjusting knob.





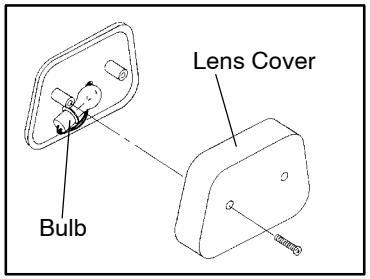
Distance from headlamp parting line to end of adjustment knob stop is 5 1/8″ (13 cm).

MAINTENANCE

Taillight/Brakelight Lamp Replacement

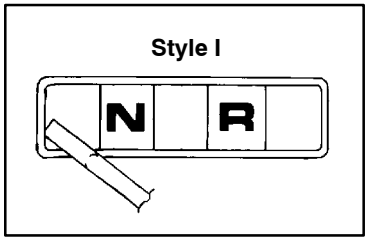
If the taillight/brakelight does not work the lamp may need to be replaced.

1. From the rear of the taillight remove two screws holding lens cover in place and remove lens cover.
2. Remove lamp and replace it with recommended lamp.
3. Test the taillight/brakelight to see that it's working.
4. Reinstall the lens cover removed in step 1.



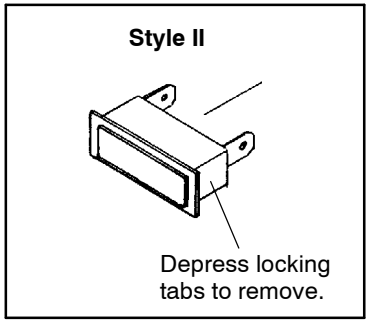
Indicator Lamp Replacement - Style I

1. With a small, flat screwdriver gently pry loose the indicator light cover.
2. Using a small flexible tube (such as an oil delivery hose) grasp the burned out lamp and remove it.
3. Replace the removed lamp with a Polaris PN 4030042 (Sylvania PN 12POL).
4. Replace the indicator light cover.



Indicator Lamp Replacement - Style II

1. Follow steps 1 - 3 of Headlight Housing Replacement on previous page.
2. Unplug light from harness, depress locking tabs and remove from pod.
3. Install new light and reassemble pod.



Cleaning Your ATV

Keeping your ATV clean will not only improve its appearance but it can also extend the life of various components. With a few precautions, your ATV can be cleaned much like an automobile.

Washing

If a high pressure type car wash system is used, extreme care must be taken to avoid water damage to the wheel bearings, transmission seals, body panels, brakes and warning labels. Many expensive repair bills can result from using high pressure detergent systems.

NOTE: If a high pressure car wash is used, grease all zerk fittings immediately after washing. Also run the vehicle to evaporate any water that might have entered the engine or exhaust system.

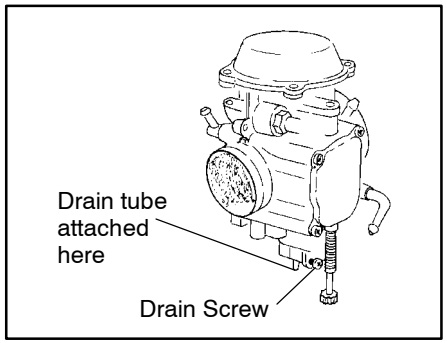
The best and safest way to clean your ATV is with a garden hose and a pail of mild soap and water. Use a professional type washing mitten, cleaning the upper body first and the lower parts last. Rinse with water frequently and dry with a chamois to prevent water spots. **NOTE:** If warning labels are damaged, contact your a Polaris dealer for free replacement.

Waxing

Your ATV can be waxed with any quality brand automotive paste wax. Avoid the use of harsh cleaners since they can scratch the body finish.

Storage

If your ATV is to be placed in extended or off season storage, the following steps should be taken to preserve its condition.

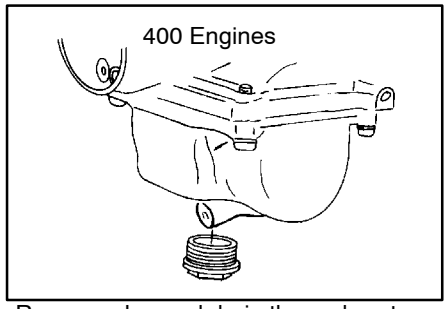


1. Perform all necessary repairs and thoroughly clean the ATV.
2. Turn the fuel valve to “off” and drain the carburetor.
3. On 2-cycle engines, remove the spark plug and pour approximately one ounce of injection oil into the cylinder. Operate the starter for a few seconds and reinstall the spark plug.
4. On 4-cycle engines, remove the spark plug and pour approximately one ounce of Premium 4 oil into the cylinder. Operate the starter for a few seconds and reinstall the spark plug.
5. Remove the battery. Store it in a cool, dry place out of the sun.
6. Lubricate suspension pivot points, lower steering post, all U-joints (if any) and rear axle fittings (if any).

MAINTENANCE

Storage (Cont.)

7. Drain the recoil housing.
8. Block the ATV so all tires are suspended off the ground.
9. Add Polaris Premium Storage Stabilizer to the fuel tank.
10. Cover the ATV with a canvas cover. Do not use plastic or coated materials since they do not allow ventilation of the vehicle.



Remove plug and drain the carburetor

Transporting

Whenever the ATV is to be transported the following measures should be taken.

1. Turn the fuel valve to off.
2. Be certain the fuel cap and oil cap are installed correctly.
3. Always tie the frame of the ATV to the transporting unit securely using suitable straps or rope.
4. Always place the transmission in gear and lock the parking brake.

Carburetor Adjustments

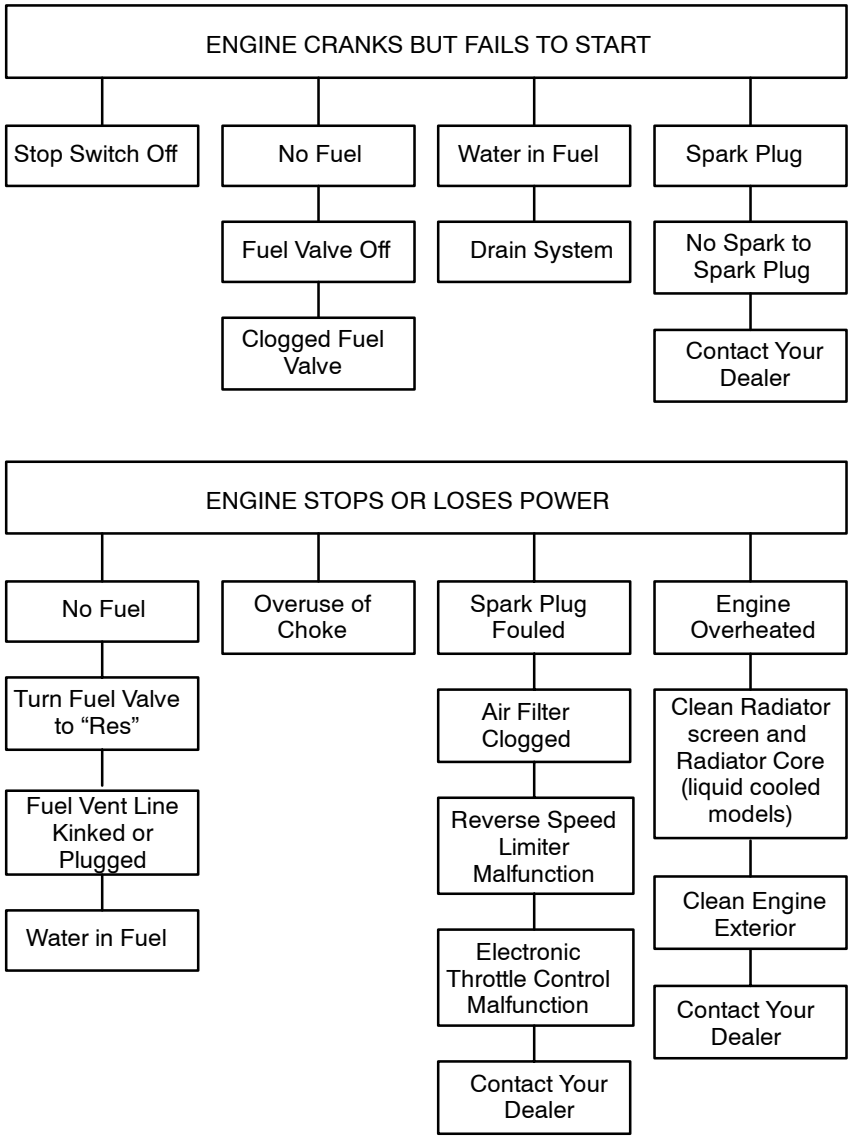
If the vehicle is to be operated at various altitudes and temperatures, certain adjustments can be made to improve its operation and driveability. Above 6000 feet (1800 m) the engine air/fuel mixture becomes overly rich. An engine loses approximately 3% of its power for each 1000 foot (304.8 m) increase in elevation. Although this power cannot be regained, changes to the carburetor and drive system can be made to allow efficient operation. These changes include:

1. Carburetor re-jetting to compensate for altitude and/or temperature changes.
2. Transmission convertor modification to adjust for engine horsepower loss during high altitude operation. Contact your dealer.
3. On 2 cycle models, air screw adjustments can be made to compensate for temperature changes and/or changes in altitude.
4. On 4 cycle models, pilot screw adjustments can be made to compensate for temperature changes and/or changes in altitude.

NOTE: Contact your dealer for altitude adjustments. They have the training and special tools required to perform all necessary modifications for you.

Procedures

The following information is provided to help you identify probable causes for questions you may have about the operation of your ATV. See your Polaris dealer with any additional questions you may have.



PAINT CODES

Model	Item	Color	Raw Material No.	PPG Ditzler No.
1998 Trail Boss	Springs	Fire Red	8520149	7060
	Rims	Bright White	8520153	2185
	Rack	Fire Red	8520149	72060
1998 Magnum 2x4	Springs	Black	8520147	9440
	Rims	Brushed Aluminum	N/A	N/A
	Rack	Black	8520147	9440
1998 Trail Blazer	Springs	Fire Red	8520149	72060
	Rims	Bright White	85200153	2185
1998 Scrambler 400	Springs	Fire Red	8520149	72060
	Rims	Bright White	8520153	2185
1998 Scrambler 500	Springs	Black	8520147	9440
	Rims	Brushed Aluminum	N/A	N/A
1998 Magnum 4x4	Springs	Fire Red	8520149	72060
	Rims	Brushed Aluminum	N/A	N/A
	Rack	E.B. Green	8520150	44931
1998 Sport	Springs	Fire Red	8520149	72060
	Rims	Bright White	8520153	2185
1998 Xplorer 500	Springs	Bonnie Blue	8520148	12908
	Rims	Brushed Aluminum	N/A	N/A

PAINT CODES

Model	Item	Color	Raw Material No.	PPG Ditzler No.
1998 Xplorer 300	Springs	Fire Red	8520149	72060
	Rims	Brushed Aluminum	N/A	N/A
1998 Xplorer 400	Springs	Burnished Brown	8520264	N/A
	Rims	Brushed Aluminum	N/A	N/A
1998 Sportsman 500	Springs	Black	8520147	9440
	Rims	Black	8520147	9440
1998 Xpress 300	Springs	Bonnie Blue	8520148	12908
	Rims	Brushed Aluminum	N/A	N/A

Order direct from Midwest Industrial Coatings (612) 934-2852. Mix as directed.

ACCESSORIES

	Trail Blazer	Trail Boss	Sport	Xpress 300
14 Gallon Sprayer	N/A	2871087	N/A	2871087
Boom Mounting Kit	N/A	2871340	N/A	2871340
42″ Spray Boom	N/A	2871088	N/A	2871088
123″ Spray Boom	N/A	2871089	N/A	2871089
Seeder/Spreader, Elec.	N/A	2871219	N/A	2871219
Speedometer	2871275	2871275	2871341	2761539
20mph Speedometer	N/A	N/A	N/A	N/A
Speedometer Protector	N/A	N/A	N/A	N/A
Elect. Accessory Brd.	N/A	N/A	N/A	N/A
Gas Gauge Cap	2871442	2871442	2871442	2871442
Chains, pair (Rear)	2870684	2870684	2870684	2870790
Ramps, for Pick-up Tailgate	2871495	2871495	2871495	2871495
Utilitiy Trailer	N/A	2871498	N/A	2871498
Utility Trailer (Rubbermaid)	N/A	2871338	N/A	2871338
Windshield Kit, Clear	2870864	2870864	2870864	2870864
Fairing Kit, Black	N/A	2871817	N/A	2871817
Fox Shock, Rear	2871513	2871513	STD	2871513
1 3/8″ CAM Adjust Rear Shock	2761514	2761514	2761514	2761514
Shock Covers, Front	2871790	2871790	2871790	2871791
Shock Covers, Rear	2871793	2871793	2871793	2871793
Throttle/Thumb Warmer	2871314	2871314	2871314	2871314
Handwarmer, Dual Heat	2760586	2760586	2760586	2760586
Engine Heater	N/A	N/A	N/A	N/A
Mud Skirt, Front & Rear	N/A	2871106	N/A	N/A
Mud Skirt, Front	2871777	N/A	2871777	N/A
Mud Skirt, Rear	2761505	N/A	2761505	N/A
Hand Guards	2871778	2871778	2871778	2871778

Magnum 2x4	Scrambler 400	Scrambler 500	Xplorer 300	Xplorer 400	Xplorer 500
2871087	N/A	N/A	2871087	2871087	2871087
2871340	N/A	N/A	2871340	2871340	2871340
2871088	N/A	N/A	2871088	2871088	2871088
2871089	N/A	N/A	2871089	2871089	2871089
2871219	N/A	N/A	2871219	2871219	2871219
STD	TBA	TBA	2871539	STD	2871789
2871085	N/A	N/A	N/A	2871353	N/A
2871316	N/A	N/A	N/A	N/A	N/A
2871802	2871802	2871802	N/A	N/A	N/A
2871441	2871442	2871441	2871442	2871442	N/A
2870684	2870684	2870684	2870790	2870948	2870948
2871495	2871495	2871495	2871495	2871495	2871495
2871498	N/A	N/A	2871498	2871498	2871498
2871338	N/A	N/A	2871338	2871338	2871338
2870864	2871324	2871324	2870864	2871324	2870864
2871817	N/A	N/A	2871817	2871816	2871817
2871513	STD	STD	2871513	2871513	N/A
STD	2871514	2871514	2871514	STD	N/A
2871791	2871792	2871792	2871791	2871791	2871791
2871793	2871793	2871793	2871793	2871793	2871794
2871314	2871314	2871314	2871314	2871314	2871314
2870586	2870586	2870586	2870586	2870586	2870586
2871507	N/A	2871507	N/A	N/A	2871507
2871106	N/A	N/A	N/A	N/A	N/A
N/A	2871777	2871777	N/A	N/A	N/A
N/A	2871505	2871505	N/A	N/A	N/A
2871778	TBA	TBA	2871778	2871778	2871778

ACCESSORIES

	Trail Blazer	Trail Boss	Sport	Xpress 300
Gun Scabbard	N/A	2870854	N/A	2870854
CV Protector	N/A	N/A	N/A	N/A
Rack Bag, Large, Black	N/A	N/A	N/A	2871787
Rack Bag, Gray/Black	N/A	N/A	N/A	2871216
Rack Bag, Camo	N/A	N/A	N/A	2871506
Dual Headlights	2871490	N/A	2871490	STD
K&N Air Filter	2871509	2871509	2871508	2871509
Cover, Red/Blue	2870796	2870796	2870796	2870796
Cover for ATV w/wind-shield Red/Blue	N/A	2871313	N/A	2871313
Cover, Camo	2871084	2871084	2871084	2871084
Safety Whip Flag	2870799	2870799	2870799	2870799
Reverse Warning Kit (Sound)	2870991	2870991	2870991	2870991
Hour Meter	2871011	2871011	2871011	2871011
8 hp 40″ Rear Mower	N/A	2871457	N/A	2871457
10.5 hp 40″ Rear Mower	N/A	2871491	N/A	2871491
12 hp 60″ Rear Mower (E/S)	N/A	2871493	N/A	2871493
12 hp 60″ Rear Mower (Recoil)	N/A	2871492	N/A	N/A
V-Plow	N/A	2871795	N/A	2871795
48″ Snow/Dirt Blade	N/A	2871730	N/A	2871730
60″ Blade	N/A	2871731	N/A	2871731
Blade Attachment Kit	N/A	2871799	N/A	2871738
Plow Frame Kit	N/A	2871732	N/A	2871732
3-pt Hitch Kit	N/A	N/A	N/A	N/A
Rear Blade for 3-Pt	N/A	N/A	N/A	N/A
Cultivator for 3 pt Hitch	N/A	N/A	N/A	N/A
2000 lb Warn Winch Kit	N/A	N/A	N/A	N/A
Accessory Winch Kit	N/A	N/A	N/A	N/A
Front Rack Kit	N/A	2870775	N/A	STD

Magnum 2x4	Scrambler 400	Scrambler 500	Xplorer 300	Xplorer 400	Xplorer 500
2870854	N/A	N/A	2870854	2870854	N/A
N/A	2871234	2871234	2871234	2871234	STD
2871787	N/A	N/A	2871787	2871787	2871787
2871216	N/A	N/A	2871216	2871216	2871216
2871506	N/A	N/A	2871506	2871506	2871506
2870936	STD	STD	STD	STD	STD
2871508	2871508	2871786	2871509	2871509	1871786
2870796	2870796	2870796	2870796	2870796	2870796
2871313	N/A	N/A	2871313	2871313	2871313
2871084	2871084	2871084	2871084	2871084	2871084
2980799	2980799	2980799	2980799	2980799	2980799
2870991	2870991	2870991	2870991	2870991	2870991
2871011	2871011	2871011	2871011	2871011	2871011
2871457	N/A	N/A	2871457	2871457	2871457
2871491	N/A	N/A	2871491	2871491	2871491
2871493	N/A	N/A	2871493	2871493	2871493
2871492	N/A	N/A	2871492	2871492	2871492
2871795	N/A	N/A	2871795	2871795	2871795
2871730	N/A	N/A	2871730	2871730	2871730
2871731	N/A	N/A	2871731	2871731	2871731
2871734	N/A	N/A	2871736	2871736	2871740
2871732	N/A	N/A	2871732	2871732	2871732
N/A	N/A	N/A	2871511	2871511	TBA
N/A	N/A	N/A	2870866	2870866	TBA
N/A	N/A	N/A	2871317	2871317	TBA
2871776	N/A	N/A	2871775	2871775	2871775
2871461	N/A	N/A	2871461	2871461	2871461
STD	N/A	N/A	STD	STD	STD

ACCESSORIES

	Trail Blazer	Trail Boss	Sport	Xpress 300
Rear Rack Kit	2871357	STD	2871357	STD
Front Rack Extender 3.5″	N/A	2871502	N/A	2871499
Front Rack Extender 8″	N/A	N/A	N/A	2871318
Rear Rack Extender 3.5″	N/A	2871504	N/A	2871501
Rear Rack Extender 8″	N/A	2870918	N/A	2871319
Gun Shovel Holder	2871315	2871315	2871315	2761427

Magnum 2x4	Scrambler 400	Scrambler 500	Xplorer 300	Xplorer 400	Xplorer 500
STD	2871357	2871357	STD	STD	STD
2871502	N/A	N/A	2871499	2871499	2871499
2870931	N/A	N/A	2871318	2871318	2871318
2871503	N/A	N/A	2871501	2871501	2871501
2870942	N/A	N/A	2871319	2871319	2871319
2871315	2871315	2871315	2871427	2871427	2871427

ACCESSORIES

	Magnum 4x4	Sportsman 500		
14 Gallon Sprayer	2871087	2871087		
Boom Mounting Kit	2871340	2871340		
42″ Spray Boom	2871088	2871088		
123″ Spray Boom	2871089	2871089		
Seeder/Spreader, Elec.	2871219	2871219		
Speedometer	STD	STD		
20mph Speedometer	2871085	2871353		
Speedometer Protector	2871316	N/A		
Elect. Accessory Brd.	2871802	N/A		
Gas Gauge Cap	2871441	N/A		
Chains, pair (Rear)	2870948	2870948		
Ramps, for Pick-up Tail-gate	2871495	2871495		
Utilitiy Trailer	2871498	2871498		
Utility Trailer (Rubber-maid)	2871338	2871338		
Windshield Kit, Clear	2870864	2871324		
Fairing Kit, Black	2871817	2871816		
Fox Shock, Rear	2871513	N/A		
1 3/8″ CAM Adjust Rear Shock	STD	N/A		
Shock Covers, Front	2871791	2871791		
Shock Covers, Rear	2871793	2871794		
Throttle/Thumb Warmer	2871314	2871314		
Handwarmer, Dual Heat	2870586	2870586		
Engine Heater	2871507	2871507		
Mud Skirt, Front & Rear	STD	N/A		
Mud Skirt, Front	N/A	N/A		
Mud Skirt, Rear	N/A	N/A		
Hand Guards	2871778	2871778		

	Magnum 4x4	Sportsman 500		
Rear Rack Kit	STD	STD		
Front Rack Extender (3.5″)	2871502	2871499		
Gun Scabbard	2870854	2870854		
CV Protector	2871234	STD		
Rack Bag, Large, Black	2871787	2871787		
Rack Bag, Gray/Black	2871216	2871216		
Rack Bag, Camo	2871506	2871506		
Dual Headlights	STD	STD		
K&N Air Filter	2871508	2871786		
Cover, Red/Blue	2870796	2870796		
Cover for ATV w/wind-shield Red/Blue	2871313	2871313		
Cover, Camo	2871084	2871084		
Safety Whip Flag	2870799	2870799		
Reverse Warning Kit (Sound)	2870991	2870991		
Hour Meter	2871011	2871011		
8 hp 40″ Rear Mower	2871457	2871457		
10.5 hp 40″ Rear Mower	2871491	2871491		
12 hp 60″ Rear Mower	2871493	2871493		
12 hp 60″ Rear Mower (Recoil)	2871492	2871492		
V-Plow	2761795	2761795		
48″ Snow/Dirt Blade	2761730	2761730		
60″ Blade	2871731	2871731		
Blade Attachment Kit	2871734	2871740		
Plow Frame Kit	2871732	2871732		
3-pt Hitch Kit	2871512	N/A		
Rear Blade for 3-Pt	2870886	N/A		
Cultivator for 3 pt Hitch	2871317	N/A		
2000 lb Warn Winch Kit	2871776	2871775		

ACCESSORIES

	Magnum 4x4	Sportsman 500		
Accessory Winch Kit	2871461	2871461		
Front Rack Kit	STD	STD		
Front Rack Extender 8″	2870931	2871318		
Rear Rack Extender 3.5″	2871503	STD		
Rear Rack Extender 8″	2870942	2871319		
Gun Shovel Holder	2871315	2871427		

LIMITED WARRANTY

Polaris Industries Inc., 1225 Highway 169 North, Minneapolis, Minnesota 55441-5078, gives a SIX MONTH LIMITED WARRANTY on all components of the Polaris All Terrain Vehicle (ATV) against defects in material or workmanship. Polaris also gives a one year limited warranty on the final drive chain for failure due to defects. This warranty covers the parts and labor charges for repair or replacement of defective parts which are covered by this warranty. This warranty begins on the date of purchase. This warranty is transferrable to another consumer during the warranty period through a Polaris dealer. There is a charge of $35.00 payable to Polaris Industries Inc.

REGISTRATION

At the time of sale, the Warranty Registration Form must be completed by your dealer and submitted to Polaris within ten days. Upon receipt of this registration, Polaris will record the registration for warranty. THE PURCHASER MUST COMPLETE AN ATV SAFETY TRAINING COURSE PROVIDED BY THE DEALER IN ORDER TO HAVE VALID WARRANTY ON THE ATV. No verification of registration will be sent to the purchaser as the copy of the Warranty Registration Form will be the warranty entitlement. If you have not signed the original registration and received the “customer copy”, please contact your dealer immediately. NO WARRANTY COVERAGE WILL BE ALLOWED UNLESS YOUR ATV IS REGISTERED WITH POLARIS.

Initial dealer preparation and set-up of your ATV is very important in ensuring trouble-free operation. Purchasing a machine in the crate or without proper dealer set-up will void your warranty coverage.

WARRANTY COVERAGE AND EXCLUSIONS:

LIMITATIONS OF WARRANTIES AND REMEDIES

The Polaris limited warranty excludes any failures that are not caused by a defect in material or workmanship. This warranty does not cover accidental damage, normal wear and tear, abuse or improper handling. This warranty also does not cover any ATV that has been altered structurally, modified, neglected, improperly maintained, used for racing, or used for purposes other than for which it was manufactured, or for any damages which occur during trailer transit or as a result of unauthorized service or the use of unauthorized parts. In addition, this warranty does not cover physical damage to paint or finish, stress cracks, tearing or puncturing of upholstery material, corrosion, or defects in parts, components or the ATV due to fire, explosions or any other cause beyond Polaris’ control.

WARRANTY

This warranty does not cover the use of unauthorized lubricants, chemicals, or fuels that are not compatible with the ATV. The exclusive remedy for breach of this warranty shall be, at Polaris' exclusive option, repair or replacement of any defective materials, or components or products. THE REMEDIES SET FORTH IN THIS WARRANTY ARE THE ONLY REMEDIES AVAILABLE TO ANY PERSON FOR BREACH OF THIS WARRANTY. POLARIS SHALL HAVE NO LIABILITY TO ANY PERSON FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY DESCRIPTION, WHETHER ARISING OUT OF EXPRESS OR IMPLIED

WARRANTY OR ANY OTHER CONTRACT, NEGLIGENCE, OR OTHER TORT OR OTHERWISE. Some states do not permit the exclusion or limitation of incidental or consequential damages or implied warranties, so the above limitations or exclusions may not apply to you if inconsistent with controlling state law.

ALL IMPLIED WARRANTIES (INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) ARE LIMITED IN DURATION TO THE ABOVE SIX MONTH WARRANTY PERIOD. POLARIS FURTHER DISCLAIMS ALL EXPRESS WARRANTIES NOT STATED IN THIS WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you if inconsistent with controlling state law.

HOW TO OBTAIN WARRANTY SERVICE

If your ATV requires warranty service, you must take it to a Polaris dealer authorized to repair Polaris ATVs. When requesting warranty service you must present your copy of the Warranty Registration form to the dealer. (THE COST OF TRANSPORTATION TO AND FROM THE DEALER IS YOUR RESPONSIBILITY). Polaris suggests that you use your original selling dealer; however, you may use any Polaris Servicing Dealer to perform warranty service.

Please work with your dealer to resolve any warranty issues. Should your dealer require any additional assistance they will contact the appropriate person at Polaris.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

If any of the above terms are void because of state or federal law, all other warranty terms will remain in effect.

Engine Oil

1. Always use Polaris engine oil.

2. Never substitute or mix oil brands as serious engine damage and voiding of warranty can result.

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